

STIC Search Report Biotech-Chem Library

STIC Database Tracking Number: 101491

TO: Sheela Huff

Location: CM1/8B07&8E12

Art Unit: 1642

Friday, August 29, 2003

Case Serial Number: 09/970969

From: Susan Hanley

Location: Biotech-Chem Library

CM1 6B05

Phone: 305-4053

susan.hanley@uspto.gov

Search Notes		
		,
·	•	
	·	



THIS PAGE BLANK (USPTO)

STIC-Biotech/ChemLib

From: Sent:

Huff, Sheela

Friday, August 22, 2003 5:52 AM STIC-Biotech/ChemLib

To: Subject:

RE: search request for 09/970969

1.UG 22 200

Not sure what you mean by only 3 sequences. The RSL (which has been marked "entered") in the file says that there are 6 sequences. The paper copy supplied by applicant also says that there are 6 sequences.

Sheela

----Original Message-----

From:

STIC-Biotech/ChemLib

Sent:

Wednesday, August 20, 2003 6:30 AM

To:

Huff, Sheela

Subject:

RE: search request for 09/970969

----Original Message-----

From: Huff, Sheela

Sent:

Tuesday, August 19, 2003 6:12 AM

STIC-Biotech/ChemLib To:

Subject: search request for 09/970969

THERE ARE ONLY 3 SEQ FOR THIS NUMBER. **MAUDE**

Please search and interference search SEQ ID No. 1-6 of the above application.

Thanks--

Sheela Huff Art Unit 1642 CM1-8807 mailbox 8E12 305-7866

Searcher:
Phone:
Location:
Date Picked Up:
Date Completed:
Searcher Prep/Review:
Clerical:
Online time:

TYPE OF SEARCH:
NA Sequences:
AA Sequences:
Structures:
Bibliographic:
Litigation:
Full text:
Patent Family:

VENDOR/COST (where ap	plic.)
STN:	
DIALOG:	
Questel/Orbit:	
DRLink:	
Lexis/Nexis:	
Sequence Sys.:	
WWW/Internet:	
Other (specify):	

THIS PAGE BLANK (USPTO)

-

Human novel polynu PAP-I-protein C fu PAP-I-protein C fu Bovine EST associa Coding strand of c Bovine EST associa Coding strand of c Bovine EST associa CDNA encoding huma Human cancer assoc

Sequence encoding
Human lipocortin-V
Lung cancer associ
Toxicologically re

PAP-I. Homo saple Sequence encoding

CDNA from hu Anticoagulant PP4

Mouse ischaemic co Rat sequence diffe Human annexin V pr Modified annexin p

Human covarian tumo
Human cDNA #220 di
Human placenta-der
DNA encoding novel
Human cDNA differe
Gene #3844 used to
CDNA of human plac
Human NOVX polynuc
Human colon cancer
Phase-l Rat CT gen
Human lung cancerHuman lung cancer
Human lung cancer
Human lung cancer
Human lung cancer
Annexin XI gene in

ABN97346 AAQ02887

ABX72249 ABQ59306

ABT09335 AAC65957

ABX63220

AAZ77514

AAQ02888 AAS93800

AAH72826

Title: Perfect score:

Sequence:

OM nucleic

Run on:

Scoring table:

Searched:

```
Human; annexin; chelation site; nuclear imaging; apoptosis; transplant rejection; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Modified human annexin nucleotide sequence, SEQ ID NO: 2.
                                               AAN80801
AAN80873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAC91369 standard; DNA; 981 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-MAY-2000; 2000WO-US14324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99US-0324096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16-MAR-2001 (first entry)
                                                                                                                                                                                                                                                                                                    410
1982
2155
2181
                                                                                                                                                                                                                                                                                                                                                                                     2300
2360
2468
2468
2468
2016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (UNIW ) UNIV WASHINGTON
                                                                                                                                                                                                   847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-080465/09.
P-PSDB; AAB50864.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Fait JF, Brown DS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200073332-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-DEC-2000.
                                                                                                                                                                                                                                         365
356.7
                                                                                                                                                                                                                                                                                                   350.4
349.4
349.4
349.4
349.6
348.2
348.2
348.2
348.2
346.6
316.6
315.2
3113.2
956.4
955.2
955.2
954.6
953.6
943.8
882
749.4
                                                                                                                                                                518.4
517.8
495.8
412.2
                                                                                                                                                                                                                                                                                   351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAC91369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAC91369
 U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Annexin V/urokinas
Vascular anti-coag
Plasmid contg. pla
Human CONA #162 di
Endonexin II compl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Modified human ann
Modified human ann
Modified human ann
                                                                                                                                 (without alignments)
12241.057 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13. (SIDSI)/gcgdata/geneseq/geneseqn-embl/NA1982.DAT:*
14. (SIDSI)/gcgdata/geneseq/geneseqn-embl/NA1982.DAT:*
15. SIDSI/gcgdata/geneseq/geneseqn-embl/NA1983.DAT:*
15. SIDSI/gcgdata/geneseq/geneseqn-embl/NA1985.DAT:*
15. (SIDSI/gcgdata/geneseq/geneseqn-embl/NA1985.DAT:*
16. (SIDSI/gcgdata/geneseq/geneseqn-embl/NA1985.DAT:*
17. (SIDSI/gcgdata/geneseq/geneseqn-embl/NA1989.DAT:*
18. (SIDSI/gcgdata/geneseq/geneseqn-embl/NA1989.DAT:*
19. (SIDSI/gcgdata/geneseq/geneseqn-embl/NA1992.DAT:*
11. (SIDSI/gcgdata/geneseq/geneseqn-embl/NA1992.DAT:*
13. (SIDSI/gcgdata/geneseq/geneseqn-embl/NA1992.DAT:*
14. (SIDSI/gcgdata/geneseq/geneseqn-embl/NA1992.DAT:*
15. (SIDSI/gcgdata/geneseq/geneseqn-embl/NA1992.DAT:*
16. (SIDSI/gcgdata/geneseq/geneseqn-embl/NA1995.DAT:*
17. (SIDSI/gcgdata/geneseq/geneseqn-embl/NA1995.DAT:*
18. (SIDSI/gcgdata/geneseq/geneseqn-embl/NA1995.DAT:*
19. (SIDSI/gcgdata/geneseq/geneseqn-embl/NA1999.DAT:*
19. (SIDSI/gcgdata/geneseq-embl/NA1999.DAT:*
19. (SIDSI/gcgdata/geneseq-embl/NA1999.DAT:*
19. (SIDSI/gcgdata/geneseqn-embl/NA1999.DAT:*
                                                                                                               August 28, 2003, 15:43:40 ; Search time 216.333 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /SIDS1/gcgdata/geneseq/geneseqn-emb1/NA2001A.DAT:*/SIDS1/gcgdata/geneseq/geneseqn-emb1/NA2001B.DAT:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /SIDS1/gcgdata/geneseq/geneseqn-emb1/NA2002.DAT:*/SIDS1/gcgdata/geneseq/geneseqn-emb1/NA2003.DAT:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Description
                                                                                                                                                                                                                 1 atggcaggtggctgtggcca......tgctctccggagaagatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /SIDSI/gcgdata/geneseq/genesegn-embl/NA1980.
/SIDS1/gcgdata/geneseq/genesegn-embl/NA1981.
                                                                                                                                                                                                                                                                                                                                    5105512
             GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                  Potal number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                   2552756 seqs, 1349719017 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAC91369
AAC91368
AAC91370
AAA11241
AAN91353
                                                                              - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABX63162
AAN91821
                                                                                                                                                                                                                                                IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N_Geneseq_19Jun03:*
                                                                                                                                                                                                                                                                                                                                                                 Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery
Match Length DB
                                                                                                                                                                          US-09-970-969-3
981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  981
981
1803
1803
1466
1567
1578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99.7
99.7
99.5
97.7
97.5
97.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          977.8
976.2
958.6
958.9
956.8
956.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score
```

..

Database

ALIGNMENTS

AAQ39149 AAQ39150

Novel modified annexin useful for imaging vascular thrombi and

981

Result . 9

N

900 900 960 960

```
721 GAGCAACTACTCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAG 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              chelation site, which comprises an amino acid extension including a glycine and a cysteine residue. The modified annexin is useful for imagina vascular thrombl or apoptosis which is associated with response to a chemotherapeutic agent or with rejection as a result of transplantation. The modified annexin can effectively chelate a radionciade and retain annexin bloactivity. It can be readily prepared in high radiochemical yield and with high radiochemical purity. In contrast to conventional conjugation chemistries that provide a distribution of conjugation products, the modified annexin has a single
                                          ACCICITITATICCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTG
                              ACCCTCTATTATGCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATG
                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               present sequence encodes a modified annexin having an N-terminal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel modified annexin useful for imaging vascular thrombi and apoptosis, has N-terminal chelation site comprising amino acid extension which comprises a glycine and a cysteine residue .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 22; Length 981;
                                                                                                                                                                                                                                                                                                                                                                                                                Human; annexin; chelation site; nuclear imaging; apoptosis; transplant rejection; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               chelation site remote from the site of biological activity.
                                                                                                                                                                                                                                                                                                                                                                                          ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                          Modified human annexin nucleotide sequence, SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 981 BP; 286 A; 187 C; 251 G; 257 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 977.8; DB 22;
Pred. No. 3.8e-274;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 25; Page 28-30; 39pp; English.
                                                                                                                                                                                                    CTGCTCTCCGGAGAAGATGAC
                                                                                                                                                                                                                   CTGCTCTCCGGAGAAGATGAC
                                                                                                                                                                                                                                                                                                      BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99.78;
99.88;
                                                                                                                                                                                                                                                                                                      AAC91368 standard; DNA; 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99US-0324096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-MAY-2000; 2000WO-US14324
                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 99.8
Matches 979; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (UNIW ) UNIV WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-080465/09.
P-PSDB; AAB50863.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tait JF, Brown DS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200073332-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                             16-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-DEC-2000
                              781
                                                       781
                                                                                    841
                                                                                                                841
                                                                                                                                           901
                                                                                                                                                                      901
                                                                                                                                                                                                   961
                                                                                                                                                                                                                               196
                                                                                                                                                                                                                                                                         RESULT 2
AAC91368
                                                                                                                                                                                                                                                                                                                     셤
                                                                                                             ద
                                                                                                                                                                                                                              셤
                              ò
                                                                                    ŏ
                                                                                                                                             ö
                                                                                                                                                                        셤
                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGACTATATCAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTA 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGCAACTACTCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAG 780
                                                                                                                                                                                                                                                                                                                                                            9
                                                                The present sequence encodes a modified annexin having an N-terminal chelation site, which comprises an amino acid extension including a glycine and a cysteine residue. The modified annexin is useful for imaging vascular thrombi or apoptosis which is associated with response tro a chemotherapeutic agent or with rejection as a result of transplantation. The modified annexin can effectively circled to a radiouncilde and retain annexin bloactivity. It can be readily prepared in high radiochemical yield and with high radiochemical purity. In contrast to conventional conjugation chemistries that provide a distribution of conjugation products, the modified annexin has a single chelation site remote from the site of biological activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGATTTGATGAGCGGCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACA
                                                                                                                                                                                                                                                                                                                                 1 ATGGCAGGTGGCTGTGGCCATATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                GATGAGGAGAGCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTGGAAAATTTGAAAATTAATTGTGGCTCTGATGAAACCCTCTGGGCTTTATGATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCCTCAAGCCTGGAAGATGACGTGGTGGGGGACACTTCAGGGTACTACCAGGGGATGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGGTTCTCCCTTCAGGCTAACAGAGCCCTGATGCTGGAATTGATGAAGCTCAAGTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITATCACCATCITTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTAC
                                                                                                                                                                                                                                                                                                    0; Gaps
 apoptosis, has N-terminal chelation site comprising amino acid
extension which comprises a glycine and a cysteine residue
                                                                                                                                                                                                                                                                      Query Match

100.0%; Score 981; DB 22; Length 981;
Best Local Similarity 100.0%; Pred. No. 4.5e-275;
Matches 981; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                             Sequence 981 BP; 286 A; 187 C; 251 G; 257 T; 0 other;
                                          Claim 26; Page 31-33; 39pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
ò
                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        음
                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
```

ö

apoptos1s; .. 02

(first entry)

```
Modified human annexin nucleotide sequence, SEQ ID
           16-MAR-2001
AAC91370;
                                                                                                                                                                                                                                                          Matches
 ð
                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                    780
                     120
                                         GATGAGGAGAGCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGGGCCAGGAAATC 180
                                                               240
                                                                                   300
                                                                                                        360
                                                                                                                             420
                                                                                                                                  480
                                                                                                                                                            480
                                                                                                                                                                      540
                                                                                                                                                                                 540
                                                                                                                                                                                           600
                                                                                                                                                                                                     600
                                                                                                                                                                                                                9
                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                                                                   960
                         300
         9
                                                                                  GGATTTGATGAGGGGGTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACA
                                                                    GTGGTTCTCCTTCAGGCTAACAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAA
                                                                                                                                                                           ACCCTCTATTATGCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATG
                                                                                                                                                                                                                                                                                    ACCTCTCTTTATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTG
                                                                                                                                                                                                                                                                                                                             GCCTCAAGCCTGGAAGATGACGTGGGGGGACACTTCAGGGTACTACCAGCGGATGTTG
                                                                                                                                                                                                                                    ATGACTATATCAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTA
     TCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTA
                                                                                                                             ATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATAT
                                                                                                                                                                                                                                                         GAGCAACTACTCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAG
ATGGCAGGTGGCCTGTGGCCATATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCT
                                                                                                       TATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATT
                                                                                                                                                                                                                                                                                                                                             981
                                                                                                                                                                                                                                                                                                                                             CTGCTCTCCGGAGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                  CTGCTCTCCGGAGAAGATGAC
                                                                                                                                                                                                     541
                                                                         181
                                                                                             24.1
                                                                                                                 301
                                                                                                                                                                                                                                                                                                  841
                                         121
                                                   121
                                                              181
                                                                                   241
                                                                                                       301
                                                                                                                            361
                                                                                                                                       361
                                                                                                                                                 421
                                                                                                                                                           421
                                                                                                                                                                      181
                                                                                                                                                                                181
                                                                                                                                                                                          541
                                                                                                                                                                                                               201
                                                                                                                                                                                                                         109
                                                                                                                                                                                                                                    199
                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                  901
                                                                                                                                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                                                      961
                                                                                                               g
                                                                                                                                                        g
                                                                                                                                                                     ò
                                                                                                                                                                             g
                                                                                                                                                                                                   g
                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                             엄
                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                            õ
                                                  g
                                                                    ద
                                                                                         8
                                                                                                    à
                                                                                                                           ð
                                                                                                                                   셤
                                                                                                                                             õ
                                                                                                                                                                                        à
                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                   õ
                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                             ò
         셤
                                       ö
                                                             ç
                                                                                ð
```

BP

AAC91370 standard; DNA; 981

AAC91370 ID AAC9 XX 'n RESULT

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present sequence encodes a modified annexin having an N-terminal chelation site, which comprises an amino acid extension including a glycine and a cysteine residue. The modified annexin is useful for imaging vascular thrombi or apoptosis which is associated with response tro a chemotherapeutic agent or with rejection as a result of transplantation. The modified annexin can effectively chelate a radiounclide and retain annexin bloactivity. It can be readily prepared in high radiochemical yield and with high radiochemical purity. In concrett to conventional conjugation chemistries that provide a distribution of conjugation products, the modified annexin has a single chelation site remote from the site of biological activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 ATGGCAGGTGGCTGTGGCCATATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACTGGAAAATTTGAAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACTGGAAAATTTGAAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel modified annexin useful for imaging vascular thrombi and apoptosis, has N-terminal chelation site comprising amino acid extension which comprises a glycine and a cysteine residue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 976.2; DB 22; Length 981;
Pred. No. 1.1e-273;
0; Mismatches 3; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Seguence 981 BP; 286 A; 187 C; 250 G; 258 T; 0 other;
Human; annexin; chelation site; nuclear imaging; transplant rejection; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 27; Page 35-37; 39pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99.5%;
                                                                                                                                                                                                      25-MAY-2000; 2000WO-US14324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 99.7
nes 978; Conservative
                                                                                                                                                                                                                                                                                      (UNIW ) UNIV WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-080465/09.
P-PSDB; AAB50865.
                                                                                                                                                                                                                                                                                                                                   rait JF, Brown DS
                                                                                                                 W0200073332-A1.
                                                                        Homo sapiens
                                                                                                                                                            37-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
```

```
Yang
                                           WPI: 2000-413098/36
                                                  P-PSDB; AAY92930
                               Sun J,
     12-MAR-1999;
                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1420
                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                               ₩n x,
                                                                                                                                                                   Best Loca
Matches
셤
                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                      ö
                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                          ŏ
                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                          480
                                                        540
                                                                                                                                                                                      840
                                                                                                                                                                                                               900
                                                                                                                                                                                                                                        960
                              480
                                                                                900
                                                                                             9
                                                                                                         099
                                                                                                                      99
                                                                                                                                   720
                                                                                                                                                720
                                                                                                                                                                        780
                                                                                                                                                                                                                                                                                                                                                               Annexin V; thrombocyte; carrier; thrombus; thrombolytic; fusion protein; urokinase; insect cell; fibrinolysis; ss.
                                                                                                                                                                                                                                       ATGACTATATCAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTA
                                                                                                                                         GTGGTTCTCCTTCAGGCTAACAGAGCCCTGATGCTGGAATTGATGAAGCTCAAGTTGAA
                                                                                CAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAG
                                                                                                         TTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTAC
                                                                                                                                                            GAGCAACTACTCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAG
                                                                                                                                                                                     ACCCTCTATTATGCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATG
                                                                                                                                                                                                              GGCTCAAGCCTGGAAGATGACGTGGTGGGGGACACTTCAGGGGTACTACCAGCGGATGTTG
                ATTIGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATAT
                                                                                                                                                                                                                                                                                                                                                                                                                        'n
                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "no start or stop codons are given at the or 3' ends of the sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                 "annexin V/urokinase fusion protein"
                                                                                                                                                                                                                                                                                                                                                   Annexin V/urokinase fusion construct
                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                 CTGCTCTCCGGAGAAGATGAC 981
                                                                                                                                                                                                                                                                       CTGCTCTCCGGAGAAGATGAC 981
                                                                                                                                                                                                                                                                                                            ВР
                                                                                                                                                                                                                                                                                                            DNA; 1803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99CN-0113524
                                                                                                                                                                                                                                                                                                                                                                                                          /*tag= a
/product=
                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                            AAA11241 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-MAR-1999;
                                                                                                                                                                                                                                                                                                                                     25-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                  Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                          CN1247195-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-MAR-2000
                                                                                                                                                                                                                          841
                361
                                         421
                                                                                541
                                                                                            541
                                                                                                                      601
                                                                                                                                  661
                                                                                                                                               661
                                                                                                                                                                        721
                                                                                                                                                                                    781
                                                                                                                                                                                                 781
                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                         AAA11241;
                                                                                                         601
                                                                                                                                                           721
                                                                                                                                                                                                                                                                961
    361
                             121
                                                      181
                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                               Key
                                                                                                                                                                                                                                                                                                      AAA1124
                                                                                                                                                                                                                                                                                                RESULT
                                                                                                                                                                                                g
                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                             g
                             ò
                                         g
                                                      å
                                                                   임
                                                                               ò
                                                                                           셤
                                                                                                         à
                                                                                                                    õ
                                                                                                                                             QQ
                                                                                                                                                           ò
                                                                                                                                                                      g
                                                                                                                                                                                    å
                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                ð
```

```
1119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541 CAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGCACAGATGAAGAAAG 600
.
1360 CAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAA 1419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 GGATTTGATGAGCGGGCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                      this sequence) comprising the Annexin V gene and a low-molecular urokinase gene, in insect cells. The Annexin V-scu-PA-32 fusion protein, expressed in insect cell strain In-5814, has high affinity for active thrombocytes and has the fibrinolytic activity of urokinase.
                                                                                                                                                                                                                                                                                                                              Annexin V, which has high affinity for active thrombocytes, is used as a carrier molecule to build a thrombus-targeting thrombolytic fusion protein. The protein is the result of expression of a fusion gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 GATGAGGAGGATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301 TATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  940 GATGAGGAGAGCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCCAGGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGGTTCTCCTTCAGGCTAACAGAGCCCTGATGCTGGAATTGATGAAGCTCAAGTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 ATGGCAGGTGGCTGTGGCCATATGGCACAGGTTCTCAGAGGCACTGTGACTTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421 GGCTCAAGCCTGGAAGATGACGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181 TCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 ACTGGAAAATTTGAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361 ATTGCTTCAAGGACACCTGAAGAACTGAGGCCATCAAACAAGTTTATGAAGAAGAATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                 - comprises
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97.7%; Score 958.6; DB 21; Length 1803; 98.6%; Pred, No. 2e-268;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                               New thrombolytic fusion protein for targetting thrombus fusion of Annexin V and urokinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1803 BP; 495 A; 415 C; 462 G; 431 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred, No. 2e-268;
0; Mismatches 14;
                                              (SHAN-) SHANGHAI INST BIOCHEMISTRY CHINESE ACAD
                                                                                                                                                                                                                                                                                    Claim 2; Page 2-4; 20pp; Chinese.
99CN-0113524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity 98,6
les 967; Conservative
```

ö

Gaps

ö

22 88

```
reagents to detect VAC proteins, as affinity ligands for purificn. of VACs and as medicaments for binding and/or neutralising VAC proteins in vivo. See also AAN913154 and EP-181465. (Updated on 10-WAR-2003 to add missing OS field.) (Updated on 25-WAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAA
                                                                                                                                                                                   GCCTTGAAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACA
                                                                                                                                                                                                                                                                                                                                                           CCTGAAGAACTGAGAGCCATCAAACAAGTTATGAAGAAGAATATGGCTCAAGCCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTGATCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTTATTCC
                                                                                                                               76 GCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATC
                                                                                                                                                                                                                  136 CTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAG
                                                                                                                                                                                                                                                                                                        AAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACAT
                                                                                                                                                                                                                                                                                                                    389 CCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                   GATGACGTGGTGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTAACAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGA
                                                                                      Length 1466;
                                                                                                          Indels
                                                                                     Score 958; DB 10;
Pred. No. 2.7e-268;
0; Mismatches 5;
                                                                 425 T; 0
                                                                 Sequence 1466 BP; 423 A; 291 C; 327 G;
                                                                                    97.7%;
ilarity 99.5%;
Conservative
                                                                                               Similarity
                                                                                                         datches 961;
                                                                                                                                16
                                                                                                                                                   59
                                                                                                                                                                                                                                                                                                      256
                                                                                                                                                                                                                                                                                                                            269
                                                                                                                                                                                                                                                                                                                                                 316
                                                                                                                                                                                                                                                                                                                                                                                           376
                                                                                                                                                                                                                                                                                                                                                                                                                                   98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       916
                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  698
                                                                                      Query Match
                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
   88888888
                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                  음
                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                  οχ
                                                                                                                                                                                                                                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                 엄
                                                                                                                                                                                            g
                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                ò
                                                                                                                                                                       Qγ
                                                                                                 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The vascular anti-coagulating protein (VAC)-alpha encoded by this cDNA is used in the preparation of monoclonal antibodies (MAbs). The VAC-alpha is injected into a host animal, in conjugation with eg keyhole limpet haemocyanin, and the B-cells from the immunised hosts are then fused with myeloma calls. The resultant hybridomas (VAA-8 and VAA-9) produce Abs specific to VAC-alpha. The Abs can be used as immunoassay
  ATGACTATATCAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTA
                     ATGACTATATCAGGATTTCAAATTGAGGAAACCATTGACGCGGGGAGCTTCTGGCAATTTA
                                           GAGCAACTACTCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAG
                                                      ACCTCTCTTTATTCCATGATTAAGGGAGATACATCTGGGGGACTATAAGAAAGCTCTTCTG
                                                                                                                                                                                   ACCCTCTATTATGCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATG
                                                                                                                                                                                                                                                                                                                                                                                                     proteins; hybridomas; B-cells; myelomas;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Monoclonal antibodies to vascular anti-coagulating proteins hybridomas producing such antibodies.
                                                                                                                                                                                                                                                                                                                                                                               Vascular anti-coagulating protein-alpha cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag= a
/label=VAC-alpha cDNA
                                                                                                                                                                                                                             Location/Qualifiers
35..996
                                                                                                                                                                                                                  CTGCTCTCCGGAGAGATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             German.
                                                                                                                                                                                                                                                                                            BP
                                                                                                                                                                                                                                                                                           AAN91353 standard; DNA; 1466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (BOEH ) BOEHRINGER INGELHEIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             88DE-3810331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       88DE-3810331
                                                                                                                                                                                                                                                                                                                                      (updated)
(updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                   Vascular anti-coagulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             fig 1; 11pp;
                                                                                                                                                                                                                                                                                                                                                                                                                        - Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1989-293724/41.
P-PSDB; AAP91953.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-MAR-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-MAR-1988;
                                                                                                                                                                                                                                                                                                                                               10-MAR-2003
30-JUL-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure;
                                                                                                                                                                                                                                                                                                                                      25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DE3810331-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gunther A;
                                                                                                                                                                                                                                                                                                                                                                                                                        Chimeric
                      1480
                                                                                                         1600
                                                                                                                                                   1660
                                                                                                                                                                                            1720
                                                                                                                                                                                                                                     1780
                                                                                                                                                                                                                                                                                                                 AAN91353;
                                                                                                                                                                                                                 961
                                                                                     781
                                                                                                                                                                       901
                                          721
                                                                                                                              841
                                                                                                                                                                                                                                                                                AAN91353
                                                                                                                                                                                                                                                                      RESULT
                                                                                                                                                                                                                                                                                                      셤
                                         ò.
                                                            g
                                                                                   à
                                                                                                       셤
                                                                                                                           οŽ
                                                                                                                                             셤
                                                                                                                                                                      ò
                                                                                                                                                                                         q
                                                                                                                                                                                                          ŏ
                                                                                                                                                                                                                                 g
```

```
1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1095
                       195
                                                                                                             315
                                                                                                                                                         375
                                                                                                                                                                                                                           381
                                                                                                                                                                                                                                                495
                                             141
                                                                 255
                                                                                       201
                                                                                                                                   261
                                                                                                                                                                               321
                                                                                                                                                                                                     435
                                                                                                                                                                                                                                                                      441
                                                                                                                                                                                                                                                                                            555
                                                                                                                                                                                                                                                                                                                 501
                                                                                                                                                                                                                                                                                                                                       615
                                                                                                                                                                                                                                                                                                                                                            561
                                                                                                                                                                                                                                                                                                                                                                                 675
                                                                                                                                                                                                                                                                                                                                                                                                       621
                                                                                                                                                                                                                                                                                                                                                                                                                            735
                                                                                                                                                                                                                                                                                                                                                                                                                                                  681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               862 CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCCATGATT 921
 81
             ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                           496 GAACTGAGAGCCATCAAACAAGTTTATGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                             GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                         CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                      GAACTGAGAGCCATCAAACAAGTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                         1036 AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTGTGGAGAAGATGAC
 22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                        GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                             502 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                        562 CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTGAGGAAACCATTGACGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           976 CTGTTTAACATCAGGAAGGAGGTTTAGGAAGAATTTTGCCACCTCTTTATTTCCATGATGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           922 AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   796 ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAGCTGGGACAGATGATCATACCCTCATCAGAGTTGATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABX63162 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-FEB-2003
                                                                                                                                                                                                                                                                       382
                                                                                                                                                                                                                                                                                                                  442
                                             82
                                                                                         142
                                                                                                                                                                               262
                                                                                                                                                                                                                                                                                                                                                                                                                                                   622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABX63162;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABX63162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT
                       g
                                                                 d
                                                                                                             D
                                                                                                                                    ö
                                                                                                                                                         a
                                                                                                                                                                               ò
                                                                                                                                                                                                     g
                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AXXXEX
                                             à
                                                                                        ò
                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
Recombinant placental coagulation inhibitor – useful for the prevention and treatment of thromboses or disseminated intra-vascular coagulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This recombinant DNA sequence comprises a promoter region, ribosome binding site, initiation sequence, termination codon and a transcription terminator in addition to the placental coaquiation inhibitor gene. The polypeptide produced on culturing of transformed host cells exhibits strong anticoagulant activities and is useful for the treat-ment and prevention of eg thrombosis or disseminated intravascular coagulation in the brain, heart and peripheral blood vessels. (Updated on 10-MAR-2003 to add missing OS field.) (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                      Placental coagulation inhibitor; disseminated vascular coagulation; thrombosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 956.8; DB 9; Length 1567; Pred. No. 6.3e-268;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                      /*tag= a
/label=placental coagulation inhibitor
1568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1567 BP; 430 A; 332 C; 358 G; 447 T; 0 other;
                                                                                                                                                                                                    Plasmid contg. placental coagulation inhibitor gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                               Location/Qualiflers
136..1098
                                                                                                             AAN81113 standard; DNA; 1567 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 7; p; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97.5%;
99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                     87JP-0037227
87JP-0184428
                                                                                                                                                                                                                                                                                                                                                                                                                  88EP-0102468
                                                                                                                                                                     (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                      Д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                      /*tag=
                                                                                                                                                         (updated)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Saino Y, Iwasaki A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1988-236733/34.
WPI; 1991-329110/45.
P-PSDB; AAP80511.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (KOWA ) KOWA CO LID
                                GATGAC 981
                                                      GATGAC 994
                                                                                                                                                       25-MAR-2003
10-MAR-2003
12-NOV-1990
                                                                                                                                                                                                                                                                                                                                                           EP279459-A.
JP03219875-A.
                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                     20-FEB-1987;
23-JUL-1987;
                                                                                                                                                                                                                                                                                                                             polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                19-FEB-1988;
                                                                                                                                                                                                                                                                                                                                                                                            24-AUG-1988
          929
                                916
                                                     686
                                                                                                                                  AAN81113;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Loca
Matches
                                                                                       RESULT
AAN8111
          요
                                ò
                                                    셤
```

```
This invention relates to a combination comprising several CDNAs that are differentially expressed in activated vascular tissue. The invention also discloses a high throughput method for detecting differentially expressed cDNAs in a sample. The CDNAs of the invention may have antiarteriosclerotic; cytostatic; cardiant; hypotensire; antidiabetic; cytostatic; cardiant; hypotensire; and may be used in gene therapy. The CDNAs of the invention may be used in a sample, or screening several molecules or compounds to invention. A protect en compound that specifically binds a cDNA of the invention. A protect en compound that specifically binds a compounds to identify a ligand that specifically binds to the protect or compounds to identify a ligand that specifically binds to be used to detect a produce or purify a nationaly to the protein that can be used to detect a produce or purify a national the protein; creatment of a vascular disease, e.g. atherosclerosis, cancer, coronary artery disease, hypertension, diabetes, pre-eclampsia, ischaemia-

combinant protein from a sample. The cubcas can also be used for large-scale genetic or gene expression analysis of several new nucleic acid molecules. Antibodies to the proteins encoded by the consecute of diseases associated with abnormalities in the expression, and chronic consecuted in the protein. The present sequence consecuted in a variant of the protein. The present sequence consecuted in the protein that is differentially expressed in antibodic consecuted by the protein that is differentially expressed in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Combination for diagnosing, staging, treating, or monitoring the progression of treatment of a vascular disease, e.g. atherosclerosis, comprises several cDNAs that are differentially expressed in activated vascular tissue -
Human cDNA #162 differentially expressed in activated vascular tissue.
                                             Human, gene; ss; vascular tissue; cytostatic; atherosclerosis; cardiant; hypotensive; antidiabetic; gynaecological; vasotropic; cerebroprotective; gene therapy; vascular disease; cancer; coronary; artery disease; hypertension; diabetes; pre-eclampsia; restenosis; ischaemia-reperfusion injury; stroke;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           http.seqdata.uspto.gov/sequence.html?DocID=20020137081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page -; 18pp; English.
                                                                                                                                                                                                                                                                                                                                                                                    28-JUL-2000; 2000US-222469P. 08-JAN-2001; 2001US-260483P.
                                                                                                                                                                                                                                                                                                                                    08-JAN-2002; 2002US-0044090.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    activated vascular tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-110597/10.
                                                                                                                                                                                                                                      US2002137081-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              (BAND/) BANDMAN
                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                      26-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bandman
```

Note: The sequence data for this patent did not form part of the specification, but was obtained in electronic format directly from USPTO

Sequence 1578 BP; 432 A; 335 C; 360 G; 451 T; 0 other;

Query Match

Best Loc Matches

.8; DB 25; Length 1578; 6.3e-268;

```
ö
                                                                                  201
                                                                                                             82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT 141
                                                         8
                                                      22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                     ö
                              2; Indels
97.5%; Score 956.8;
99.8%; Pred. No. 6.3e
ive 0; Mismatches
                           Conservative
             Local Similarity
nes 958; Conserv
                                                        ò
                                                                                윱
                                                                                                            ò
```

681 741 681 741 861 801 921 861 981 921 441 381 501 441 561 501 621 561 621 801 321 261 381 321 261 201 CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT 622 CGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCCCATGATT 262 ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC 502 GAACTGAGAGCCATCAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTTCTTCAGGCTAAC 502 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA 682 ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT **AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC** AAN91821 standard; DNA; 1605 Placenta; blood coagulation (updated)
(first entry) Endonexin II complete cDNA 25-MAR-2003 16-MAR-1990 1042 AAN91821; 295 802 742 982 382 442 802 862 922 262 202 322 RESULT 8 AAN91821 g g g ŏ 9 ò 요 õ a ò 8 δ g ŏ 셤 QQ g δ g ò ò δ ŏ g ò 셤 ò

œ

```
1059
                                                                                                                                                                                                                                                                1119
                                                                                     879
                                                                                                           801
                                                                                                                                939
                                                                                                                                                      861
                                                                                                                                                                            666
                                                                                                                                                                                                921
                                                                                                                                                                                                                                            981
700 CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA 759
                     681
                                                                741
                                                                                                                       GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                      802 GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                  862 CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                 682 ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                              New DNA sequence encoding anticoagulant PP4 protein - and new recombinant protein, vectors, antibodies, etc., useful therapeutically and diagnostically.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA sequence encoding anticoagulant PP4 protein. This inhibits blood coagulation at the thromboplastin stage. The derived protein is 320 amino acids. (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR fileld.)
                                                                                                                                                                                                                                                                                                                                                                                                                       Anticoagulant; PP4 protein; thromboplastin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
1539..1575
/*tag= a
107..1066
/*tag= b
                                                                                                                                                                                                                                                                                                                      ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; table 1; 14pp; German.
                                                                                                                                                                                                                                                                                                                     AAN90112 standard; DNA; 1575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             88EP-0118039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  87DE-3737239
                                                                                                                                                                                                                                                                                                                                                                  (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (BEHW ) BEHRINGWERKE AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Abel KJ,
                                                                                                                                                                                                                                                                                                                                                                                                 Anticoagulant PP4 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1989-166767/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Grundmann U,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-OCT-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-NOV-1987;
                                                                                                                                                                                                                                                                                                                                                                25-MAR-2003
01-NOV-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-JUN-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EP318703-A.
                                                                                                            742
                                                                                                                                                                                                                                                                                                                                           AAN90112;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDS
                                                                                                                                                                                                                                                                                                            AAN90112
                                                                                                                                                                                                                                                                                                 RESULT
                                                                                                                                                                                                                                                                                                                                           à
                                         셤
                                                                 ò
                                                                                    셤
                                                                                                             ò
                                                                                                                                d
                                                                                                                                                      ò
                                                                                                                                                                          g
                                                                                                                                                                                                 ö
                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                          219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTTGGAACA 621
                                                                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                                                                                                                                                                                                               ATTIGTIGGCTCTGATGAAACCCTCTCGCCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                               Recombinant human endonexin II - which inhibits blood coagulation and phospholipase A2 and is used as an antiinflammatory agent
                                                                                                                                                                                                                                                                                                                                        Score 956.8; DB 10; Length 1605; Pred. No. 6.3e-268; 0; Mismatches 2; Indels 0;
                                                                                                                                                                                                                                                                                                                    Sequence 1605 BP; 447 A; 337 C; 366 G; 455 T; 0 other;
                                                                                                                                                                                                                                                                                    hENII is a calcium and phospholipid binding protein. (Updated on 25-MAR-2003 to correct PA field.)
                  Location/Qualifiers
160..1119
/*tag= a
                                                                                                                                                                                                                                                               Claim 1; fig. 1; 13pp; English.
                                                                                                                                                      (RORE ) RORER INT OVERSEAS INC
                                                                                                                                                                                                                                                                                                                                        97.5%;
                                                                                                           89EP-0105626
                                                                                                                                88US-0176802
                                                                                                                                                                                                                                                                                                                                                    Local Similarity 99.8
ses 958; Conservative
Homo saptens (human).
                                                                                                                                                                                             WPI; 1989-317181/44.
P-PSDB; AAP91021.
                                                                                                                                                                            Jaye M;
                                                                                                           30-MAR-1989;
                                                                                                                               31-MAR-1988;
                                                                                     02-NOV-1989
                                                               EP339285-A
                                                                                                                                                                          Kaplan R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          340
                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                          091
                                                                                                                                                                                                                                                                                                                                                                                                                                82
                                                                                                                                                                                                                                                                                                                                                                                                                                                    220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       295
                                                                                                                                                                                                                                                                                                                                                     Best Loca
Matches
                     Key
```

S 8

g

\$ B \$

ð

a

6 6 6

Aug

Fri

```
|||||||
|GATGAC 1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1988-235049/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           P-PSDB; AAP82317
                                                                                                                                                                                                                                                                   sapiens
                                                                                                                                       25-MAR-2003
13-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                      05-FEB-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-FEB-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-JUN-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fujikawa K,
                                                                                                                                                                                                                                                                                                                                                                 W08805659-A
                                                                                                                                                                                                                                                                                                                                                                                            11-AUG-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          properties
              1001
                                                                                                            AAN82107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     82
                                                                                AAN82107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                      RESULT 10
AAN82107
                                                                                                                                                                                                                                                                  Ношо
                                                                                                                                                                                                                                                                                             Key
              음
                                                                                   NAMES OF COLOR OF STREET STREE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     975
                                                                                                                                      160
                                                                                                                                                                                                                         195
                                                                                                                                                                                                                                                                                                         340
                                                                                                                                                                                                                                                                                                                                                                 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       495
                                                                                                                                                                  135
                                                                                                                                                                                              220
                                                                                                                                                                                                                                                                                                                                     315
                                                                                                                                                                                                                                                                                                                                                                                            375
                                                                                                                                                                                                                                                                                                                                                                                                                      460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       915
                                                                                                            75
                                                                                                                                                                                                                     GGCCATATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGGGG
                                                                                                                                      GCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGACATC
                                                                                                                                                                                 AAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGTTATGAACTGAAACAT
                                                                                                                                                                                                                                                                                                                                                 GCCTTGAAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACA
                                                                                                                                                                                                                                                                                                                                                                                                         CCTGAAGAACTGAGGCCATCAAACAAGTTTATGAAGAATATGGCTCAAGCCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATGACGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTATTTCAGGCTGGAGAACTTAAATGGGGGGCAGATGAAGAAAAGTTTATCACCATCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTGATCTGTTTAACATCAGGAAGGACTTTAGGAAGAATTTTGCCACCTCTCTTTATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AFGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAA
                                                                                                                                                                                                                                                                               GCTAACAGAGCCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCT
                                                                                  Gaps
                                                     Length 1575;
                                                                                ó
                                                                                Indels
                         461 A; 322 C; 351 G; 441 T; 0 other;
                                                     10;
                                                                                  9
                                                   Score 956.4; DB 10
Pred. No. 8.2e-268;
0; Mismatches 6;
(Updated on 25-MAR-2003 to correct PI field.)
                                                  tch 97.5%;
al Similarity 99.4%;
960; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATGAC 981
                         Sequence 1575 BP;
                                                                                                            16
                                                                                                                                                                                           161
                                                                                                                                                                                                                                                  221
                                                                                                                                                                                                                                                                                                       281
                                                                                                                                                                                                                                                                                                                                                               341
                                                                                                                                                                                                                                                                                                                                                                                         316
                                                                                                                                                                                                                                                                                                                                                                                                                     401
                                                                                                                                                                                                                                                                                                                                                                                                                                                376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     916
                                                                                                                                                                92
                                                                                                                                                                                                                      136
                                                                                                                                                                                                                                                                             196
                                                                                                                                                                                                                                                                                                                                    256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 701
                                                     Query Match
Best Local
                                                                   Best Loc
Matches
S \times S
                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                             ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ٥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                            å
                                                                                                                                    음
                                                                                                                                                                ð
                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                             음
                                                                                                                                                                                                                                                                          ç
                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                142 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     72
                                                                                                                                                                                                                                PAP-I; anticoagulant; anti-inflammatory agent; phospholipid; phospholipase A2; disseminated intravacular coagulation; human placenta; deep vein thrombosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human proteins having anticoagulant and antiinflammatory activity -
isolated from biological fluid by anion-exchange chromatographoc media.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13 AFGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGACATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22 ATGCCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A human placenta cDNA library (Clontech) was screened to obtain this sequence. The cDNA does not contain a leader peptide sequence, indicating that PAP-I is probably not constitutively secreted. The product binds to phospholipid and inhibits phopholipase A2. The protein can substitute heparin or other anticoagulants in the treatment of disseminated intravascular coagulation, deep vein thrombosis, or other disorders. It also has antiinflammatory
                                                                                                                                                                                  anticoagulant production
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 1454;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1454 BP; 434 A; 280 C; 324 G; 416 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ص
• •
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 955.2; DB 9;
Pred. No. 1.8e-267;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                PAP-I cDNA from human placenta, used for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BLA;
                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Carter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page ?; p; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /product-PAP-I
  standard; cDNA; 1454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             88WO-US00340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          87US-0011782
87US-0059355
                                                                                                     (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             al Similarity 99.7
957; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INC
                                                                                                                                                                                                                                                                                                                                                                                                                     ..972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ZYMO) ZYMOGENETICS IN(UNIW) UNIV WASHINGTON.
                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Iran1 MH,
```

```
GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTGTGGCTCTTATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This sequence, or a fragment of it, is used in the construction of DNA sequences encoding hybrid phospholipid-binding proteins (PBP) comprising at least one lipocortin phopholipid binding domain (PBD), occording the protein of the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 12; Length 1460;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                   Recombinant prodn. of hybrid phospholipid-binding proteins comprising lipocortin phospholipid-binding domain and vitamin K-dependent protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1460 BP; 436 A; 280 C; 323 G; 421 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. 1.8e-267;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97.4%; Score 955.2; 99.7%; Pred. No. 1.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Fig 7; 57pp; English.
                         /*tag= a
/product= PAP-I
                                                                                                                                                                                                                        89US-0459082
                                                                                                                                                                               90WO-US07335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                 (ZYMO ) ZYMOGENETICS INC
  13..972
                                                                                                                                                                                                                                                                                                                                                   WPI; 1991-222905/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best_Local Similarity
Matches 957; Conserv
                                                                                                                                                                                                                                                                                                                                                                          P-PSDB; AAR13082
                                                                                                                                                                             13-DEC-1990;
                                                                                                                                                                                                                        29-DEC-1989;
                                                                                        WO9109953-A
                                                                                                                                    11-JUL-1991
                                                                                                                                                                                                                                                                                                             ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                             Foster
    CDS
      õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     612
                                                                                                                                                                                                                                                                                                                          312
                                                                                                                                                                                                                                                                                      372
                                                                                                                                                                                                                                                                                                                                                                                                                                                          492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                861
                                                                                                                                                      321
                                                                                                                                                                                                                                                                                                                                                                                                                   501
                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                               ATTGTGGCTCTGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                               502 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC
                                                               GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CIGITITAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Phopholipid; binding protein; lipocortin; domain; vitamin K; PBP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ocation/Qualiflers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAQ12679 standard; cDNA; 1460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gla-domain; VKDP; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo saptens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-MAR-2003
30-SEP-1991
                                                                                                        193
                                                                                                                                                    262
                                                                                                                                                                                               253
                                                                                                                                                                                                                                           322
                                                                                                                                                                                                                                                                                    313
                                                                                                                                                                                                                                                                                                                               382
                                                                                                                                                                                                                                                                                                                                                                      373
                                                                                                                                                                                                                                                                                                                                                                                                                 442
                                                                                                                                                                                                                                                                                                                                                                                                                                                          433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAQ12679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAP-I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 11
AAQ12679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                THE SECTION OF THE SE
                    셤
                                                               ò
                                                                                                      9
                                                                                                                                                  ò
                                                                                                                                                                                           유
                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                          요
                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
```

91

141

```
P-PSDB; AAP80714
                                                                                                                                                   21
                                                                                                                                                                                                         154
                                                                                                                                                                                                                                                    274
                                                                                                                                                                                                                                                                          334
                                                                                                                                                                                                                                                                                                                     454
                                                                                                                                                                                                                                                                                                                                                                  574
                                                                                                                                                                        81
                                                                                                                                                                                              141
                                                                                                                                                                                                                    201
                                                                                                                                                                                                                               214
                                                                                                                                                                                                                                         261
                                                                                                                                                                                                                                                                321
                                                                                                                                                                                                                                                                                     381
                                                                                                                                                                                                                                                                                                394
                                                                                                                                                                                                                                                                                                            441
                                                                                                                                                                                                                                                                                                                                 501
                                                                                                                                                                                                                                                                                                                                                       561
                                                                                                                                                                                                                                                                                                                                                                             621
                                                                                                                                                                                                                                                                                                                                                                                        634
                                                                                                                                                                                                                                                                                                                                                                                                   681
                                                                                                                             Query Match
                                                                                                                                    Local
                 nseful
                                                                                                                                   Best Loc
Matches
                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                        g
õ
                                                                                                                                                             ద
                                                                                                                                                                        δ
                                                                                                                                                                                  g
                                                                                                                                                                                              ŏ
                                                                                                                                                                                                       合
                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                       οy
                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                               ŏ
                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                   õ
                                                                                                                                                                       972
                                                                                                       792
                                      612
                                                            672
                                                                       741
                                                                                 732
                                                                                                                             852
                                                                                                                                        921
                                                                                                                                                  912
                                                                                                                                                              981
     561
                           621
                                                 681
                                                                                            801
                                                                                                                  861
                                                                                                                                                                                                                                                                                                                                                                                         ü
                                                                                                                                                                                                                                                                                                                                                                                         Falkner
     AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
          GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                  CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                                                              AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC
                                                                                                                                                                  CAGGCTGGAGACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                  GGAGCTGGGACAGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                         protein (VAP) vAC-alpha
                                                                                                                                                                                                                                                         Vascular anticoagulating protein (VAP) VAC-alpha; anticoagulant; antiinflammatory; phospholipase inhibitory.
                                                                                                                                                                                                                                                                                                                                                                                        ပဲ
                                                                                                                                                                                                                                                                                                                                                                                         Stratowa
                                                                                                                                                                                                                                                                                                     claim 2, page 160-161"
                                                                                                                                                                                                                                                                                                                                                                                        Ъ,
                                                                                                                                                                                                                                                                                                                                                                                        Swetly
                                                                                                                                                                                                                                        Sequence encoding vascular anticoagulating (Glu22).
                                                                                                                                                                                                                                                                                                                                                                             GMBH
                                                                                                                                                                                                                                                                                                                                                                                        Ö
                                                                                                                                                                                                                                                                                    Location/Qualifiers
35..997
/*tag= a
/note="claimed in cla
                                                                                                                                                                                                                                                                                                                                                                                        Bodo
                                                                                                                                                                                                                                                                                                                                                                            (BOEH ) BOEHRINGER INGELHEIM INT
                                                                                                                                                                                                   BP
                                                                                                                                                                                                                                                                                                                                                                                        I,
CMP;
                                                                                                                                                                                                   DNA; 1466
                                                                                                                                                                                                                                                                                                                                                87DE-3710369.
87DE-3710364.
87DE-3710430.
                                                                                                                                                                                                                                                                                                                                      88WO-EP00266
                                                                                                                                                                                                                                                                                                                                                                 87DE-3737367
                                                                                                                                                                                                                         (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                        R, Maurer-Fogy
Reutlingsperger
                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1988-292861/41.
                                                                                                                                                                                                   AAN80801 standard;
                                                                                                                                                                                                                                                                                    Key
mat_peptide
                                                                                                                                                                                                                                                                                                                                                28-MAR-1987;
28-MAR-1987;
28-MAR-1987;
                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                     26-MAR-1988;
                                                                                                                                                                                                                        25-MAR-2003
12-SEP-1990
                                                                                                                                                                                                                                                                                                                W08807576-A.
                                                                                                                                                                                                                                                                                                                          06-ocT-1988
                                                                                                                                                                                                                                                                                                                                                                  04-NOV-1987
                                                                                                                                                                                                                                                                                                                                                                                        Hauptmann
Adolf G,
                                                                                 673
                                                                                                      733
                                                                                                                                       862
                                                                                                                                                  853
                                                                                                                                                             922
                                                                                                                                                                        913
                                                                                                                                                                                                             AANB0801;
               493
                           299
                                     553
                                                 622
                                                           613
                                                                       682
                                                                                            742
                                                                                                                  802
                                                                                                                             793
     502
                                                                                                                                                                                        RESULT 12
                                                                                                                                                                                              AAN80801
                                                                                                                                                                                                    q
                                                                                                                                                            ö
                                                                                                                                                                     8
     ò
               g
                          ò
                                   g
                                              ò
                                                         g
V
                                                                             g
                                                                                          Š
                                                                                                    g
                                                                                                              ò
                                                                                                                         a ç
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTG7 740
                                                                                        The DNA is produced by determining the amino acid sequence of isolated and highly purified VAPs, constructing DNA probes on the basis of this sequence, using the probes to search through suitable cONA libraries, isolating cDNA that hybridises with the probes, by inserting the cDNA into a suitable vector, and using the vector to transform a host organism. VAC-alpha has anticoagulant activity under certain conditions, but loses this activity in the event of severe bleeding. It acts by inhibiting conversion of factor x to factor Xa and conversion of prothrombin to thrombin. It is structurally related to lipocortin I (Nature, 320, 77, 1986) and lipocortin II (Cell, 46, 191/120, 1986) and has similar antiinflammatory and phospholipase inhibitory activity. (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94 TGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGCATCCTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TATGGCACAGGTTCTCAGAGGCACTGACTGACTTCCCTGGATTTGATGAGCGGGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGAGCATCCTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGAACTGAGAGCCATCAAACAAGTTTATGAAGAATATGGCTCAAGCCTGGAAGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAAGACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1466;
                     etc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1466 BP; 422 A; 289 C; 328 G; 424 T; 3 other;
                     agents,
                                                                                                                                                                                                                                                                                                                                                                                                                      Score 954.6; DB 9;
Pred: No. 2.6e-267;
0; Mismatches 4;
vascular anti:coagulating proteins - ul as thrombin inhibitors, antiflammatory
                                                          German.
                                                        4/1-4/3; 183pp;
                                                                                                                                                                                                                                                                                                                                                                                                                      tch 97.3%;
al Similarity 99.6%;
957; Conservative
                                                          Disclosure; Fig
```

Gaps

ö

Length 963; Indels 8 9 141 120 201 180 261 240 321 300 381 360

```
organism. VAC-alpha has anticoagulant activity under certain conditions, but loses this activity in the event of severe bleeding. It acts by inhibiting conversion of factor X to factor Xa and conversion of prothrombin to thrombin. It is structurally related to lipocottin (Nature, 320, 77, 1986) and lipocottin II (Cell, 46, 191/120, 1986) and thas similar antiinflammatory and phospholipase inhibitory activity. (Updated on 25-WAR-2003 to correct PR field.)
                                                                                                                                                                                                                  ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                               ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                             1 ATGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                           AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541 CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCCATGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGCCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 963 BP; 284 A; 183 C; 242 G; 254 T; 0 other;
                                                                                                                       Score 953.6; DB 9;
Pred. No. 4.2e-267;
0; Mismatches 4;
                                                                                                                         Query Match
Best Local Similarity 99.6%;
Matches 956; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  562
                                                                                                                                                                        22
                                                                                                                                                                                                                   82
                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                              142
                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                           202
                                                                                                                                                                                                                                                                                                                                                        262
                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                   322
                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             862
  8888888888
                                                                                                                                                                        ð
                                                                                                                                                                                             유
                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                               ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ô
                                                                                         873
                                                                                                              920
                                                                                                                                                           980
                                                                                                                                                                                 993
                                                                                                                                                                                                                                                                                                                                                                                                  Vascular anticoagulating protein (VAP) VAC-alpha; anticoagulant activity; antinflammatory; phospholipase inhibitory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    :
E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Falkner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The DNA is produced by determining the amino acid sequence of isolated and highly purified VAPs, constructing DNA probes on the basis of this sequence, using the probes to search through suitable cDNA libraries, isolating cDNA that hybridises with the probes, by inserting the CDNA into a suitable vector, and using the vector to transform a host
                                  TAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGA
                                                                                                                                                                     AATTCAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGT
                                                                  GGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGA
                                                                                                              TCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTTATTCCATGAT
                       TGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAA
                                                                                                                                                                                                                                                                                                                                                                 Sequence encoding vascular anticoagulating protein (VAP) VAC-alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Stratowa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                etc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antiflammatory agents,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Swetly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   vascular ant1:coagulating proteins
ul as thrombin inhibitors, antiflam
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ϋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (BOEH ) BOEHRINGER INGELHEIM INT GMBH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2; Page 160-161; 183pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
35..963
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bodo
                                                                                                                                                                                                                                                                                    ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CMP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    87DE-3710309.
87DE-3710364.
87DE-3710430.
87DE-3737367.
                                                                                                                                                                                                                                                                                    963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                88WO-EP00266
                                                                                                                                                                                                                                                                                                                                (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R, Maurer-Fogy
Reutlingsperger
                                                                                                                                                                                                                                                                                    DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1988-292861/41.
P-PSDB; AAP80242.
                                                                                                                                                                                                                                                                                  AAN80873 standard;
                                                                                                                                                                                                      C 981
                                                                                                                                                                                                                           994
                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-MAR-1987;
28-MAR-1987;
28-MAR-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-MAR-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hauptmann R,
Adolf G, Re
                                                                                                                                                                                                                                                                                                                               25-MAR-2003
12-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-NOV-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mat_pept1de
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WOBB07576-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-OCT-1988
                                                                                                                                                                                                                           U
                                           754
                                                                 801
                                                                                        814
                                                                                                              861
                                                                                                                                  874
                                                                                                                                                         921
                                                                                                                                                                               934
                                                                                                                                                                                                      981
                                                                                                                                                                                                                           994
                                                                                                                                                                                                                                                                                                          AAN80873;
                                                                                                                                                                                                                                                                                                                                                                            (Asp22).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim
                                                                                                                                                                                                                                                             13
                                                                                                                                                                                                                                                                       RESULT
음
                       ð
                                         셤
                                                               ò
                                                                                   g
                                                                                                             ö
                                                                                                                             g
                                                                                                                                                        ð
                                                                                                                                                                               셤
                                                                                                                                                                                                                         9
                                                                                                                                                                                                      ö
```

420

441

480

501

540

621 009

9 681

741 720 801 780 861 840 921

us-09-970-969-3.rng

```
1042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    382
                                                                                                      381
                                                                                                                                      502
                                                                                                                                                                        441
                                                                                                                                                                                                          562
                                                                                                                                                                                                                                           501
                                                                                                                                                                                                                                                                           622
                                                                                                                                                                                                                                                                                                                                              682
                                                                                                                                                                                                                                                                                                                                                                                621
                                                                                                                                                                                                                                                                                                                                                                                                              742
                                                                                                                                                                                                                                                                                                                                                                                                                                                    681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; lung cancer associated protein; neuroprotective; cytostatic; cardioactive; immunomodulatory; muscular active; vulnerary; cardioactive; immunomodulatory; muscular active; ynecological; gastrointestinal; nephrotropic; antlinfective; gynecological; antibacterial; diagnosis; neural disorder; immune disorder; reproductive; proliferative disorder; wound healing; infectious disease; ds.
                                   321
                                                                                                                                                                                                                                                                                                             561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                                                                                                                                                                                                                                                                                                ATTGTGGCTCTGATGAAACCTCTCGGCTTTATGATGCTTATGAACTGAAAACGCTTGTGTTGTTGTTGAAACTGAAAACCTTGTGTTGTTGTTGTGTGTTTGAAACTGAAAACCTCTCGGCTTTATGATGATGATTGAAACTGAAAACATGCCTTG
                                                                                                                                                                                          AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC
   GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                               CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                        AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                             GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                             AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lung cancer associated polynucleotide sequence SEQ ID 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAF18269 standard; DNA; 1637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200055180-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1043
                                                                      383
                                                                                                                                      443
                                                                                                                                                                                                          503
                                                                                                                                                                                                                                         442
                                                                                                                                                                                                                                                                                                             502
                                                                                                                                                                                                                                                                                                                                              623
                                                                                                                                                                                                                                                                                                                                                                                                                  683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAF18269;
   323
                                                                                                                                                                        382
                                                                                                                                                                                                                                                                           563
                                                                                                                                                                                                                                                                                                                                                                                262
                                                                                                                                                                                                                                                                                                                                                                                                                                                    622
                                   262
                                                                                                      322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q
                                                                  g
                                                                                                                                 g
                                                                                                                                                                                                       a
                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                           οy
                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                        δy
                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                   à
                                                                                                    ò
                                                                                                                                                                        ã
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  201.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITGCAGGGATCTTCTGGATGACCTGAAATCAGAACTAACTGGAAAATTTGAAAATTA 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22 ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human lipocortin-V was isolated from a lambda gt10 human peripheral blood lymphocyte cDNA library with rat lipocortin-V cDNA of lambda RLipo V-1 as probe. Lipocortins are anti-inflammatory agents and can be used to treat arthritic, allergic, dermatologic, ophthalmic, and collagen diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        and VI - used in treatment of ophthalmic and collagen disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1574;
                                                                                                                                                                                                                                                                                         Human lipocortin-V; lambdaRLipo V-1; anti-inflammatory agent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1574 BP; 428 A; 334 C; 366 G; 446 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Match 97.0%; Score 952; DB 10; Local Similarity 99.5%; Pred. No. 1.6e-266; Nes 955; Conservative 0; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   collagen diseases.
See also AAP91362, AAN90598, and AAP91363.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ï,
                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
complement (143..1102)
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Browning
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human lipocortin cpds. III, IV, V, arthritic, allergic, dermatologic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          involving inflammatory processes.
                                                                                                                                                        BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 4; fig 4; 32pp; English.
                                                                                                                                                     AAN90599 standard; cDNA; 1574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    89EP-0301603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     88US-0160866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RB,
                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pepinsky
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1989-250486/35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (BIOJ ) BIOGEN INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        P-PSDB, AAP91363.
                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-FEB-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-FEB-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wallner BP,
                                                                                                                                                                                                                       22-DEC-1989
                                                                                                                                                                                                                                                                                                                                                                            mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-AUG-1989
                                                                                                                                                                                                                                                                                                                                                                                                                              EP330396-A
 841
                                                                  901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  263
                                  922
                                                                                                                                                                                       AAN90599;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Loca
Matches
                                                                                                                  RESULT 1
                                                                                                                                                                                                                                                                                                                                                                Key
                                                                                                                                                                       NAME OF THE PROPERTY OF THE PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            윱
a
                                ò
                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
```

```
associated proteins represented in AABSB06 - AABSB0848 Lung cancer associated proteins represented in AABSB06 - ABSB0848 Lung cancer associated proteins and polynucleotide sequences, their agonists, and antendorstandy neuroprotective; cytostetic; cardioactive; and munomodulatory; muscular active general; vulnerary; gastrointestinal general; nephrotropic; antilnfective; gynecological; or antibacterial cartivity. The invention also includes antibodies specific for the protein or polynucleotide sequences. The lung cancer associated polynucleotide sequences may be used for detection of lung cancer, chromosome identification, as chromosome markers, and for numerous other disorders such as neural, immune, muscular, reproductive, gastrointestinal, pulmonary, cardiovascular, reproductive, disorders such as neural, immune, muscular, reproductive, disorders preprinted and proliferative infectious diseases. Polynucleotide sequences AAF18433 and infectious diseases. Polynucleotide sequences AAF18433 and peptide AABS8549 are used in the course of the invention for the course of the invention for the course of the invention for the course of the invention and protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                                                                         Lung cancer associated gene sequences, referred to as lung cancer antigens, useful for treatment, prevention, and diagnosis of disorders such as lung cancer -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         233 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGGCACAGGTTCTCAGAGGCACTGTGACTGCCTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                      Polynucleotide sequences AAF17982 - AAF18424 encode human lung cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 21; Length 1637;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1637 BP; 455 A; 349 C; 378 G; 450 T; 5 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ë
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match

96.2%; Score 943.8; DB 21
Best Local Similarity 99.6%; Pred. No. 3.9e-264;
Matches 956; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                Claim 1; Page 746; 1425pp; English.
08-MAR-2000; 2000WO-US05918
                                    99US-0124270
                                                                         SCI
                                                                         GENOME
                                                                                                                                                                 WPI; 2000-587514/55.
P-PSDB; AAB58393.
                                                                                        (ROSE/) ROSEN C A.
                                                                         HUMA-) HUMAN
                                  12-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sednences
                                                                                                                              Ruben SM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      322
a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ŏ
```

```
1011
                                                                                                                                                                                                                                                                             1131
                                                                                                                                                                                                                                           1071
                 561
                                                  621
                                                                  772
                                                                                     681
                                                                                                     831
                                                                                                                       741
                                                                                                                                      891
                                                                                                                                                        801
                                                                                                                                                                         951
                                                                                                                                                                                         861
                                                                                                                                                                                                                           921
                                                                                                                                                                                                                                                             981
                                                  593 GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                      773 CGAAGTGT-NCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                          802 GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                           CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                                       ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                 502
                                 653
                                                                                     622
                                                                                                                                                        742
                                                                                                                                                                                                                           862
                ò
                                 셤
                                                   ò
                                                                g
                                                                                     ò
                                                                                                      吕
                                                                                                                       ò
                                                                                                                                      g
                                                                                                                                                        ò
                                                                                                                                                                          g
                                                                                                                                                                                          à
                                                                                                                                                                                                          g
                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                             ò
```

Search completed: August 28, 2003, 16:03:35 Job time : 218.333 secs

532

501

aagggagctggaacaaatgaaaaagtactgacagaaattattgcttcaaggacacctgaa gaactgagagccatcaacaagtttatgaagaagaatatggctcaagcctggaagatgac

473 382 533 442

g

염

ð

GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC

```
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                              OM nucleic - nucleic search, using sw model
```

August 28, 2003, 15:43:40 ; Search time 216.333 Seconds Run on:

(without alignments)
12241.057 Million cell updates/sec

US-09-970-969-1 981 1 atggcatgtggcggtggcca......tgctctccggagagatgac 981 Perfect score: Sequence:

Scoring table:

IDENTITY_NUC Gapop 10.0 , Gapext 1.0

2552756 seqs, 1349719017 residues Searched:

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

.: /SIDS1/gcgdata/geneseg/genesegn-embl/NA1980. :: /SIDS1/gcgdata/geneseg/genesegn-embl/NA1981. /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1982. N_Geneseq_19Jun03:*

/SIDS1/gcgdata/geneseq/geneseqn-emb1/NA2001A.DAT:*/SIDS1/gcgdata/geneseq/geneseqn-emb1/NA2001B.DAT:*/SIDS1/gcgdata/geneseq/geneseqn-emb1/NA2002.DAT:*/SIDS1/gcgdata/geneseq/geneseqn-emb1/NA2003.DAT:*/SIDS1/gcgdata/geneseq/geneseqn-emb1/NA2003.DAT:* /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1995.DAT:*/SIDS1/gcgdata/geneseq/geneseqn-embl/NA1996.DAT:*/SIDS1/gcgdata/geneseqn-embl/NA1997.DAT:* 1/gcgdata/geneseq/geneseqn-embl/NA1999.DAT:* 1/gcgdata/geneseq/geneseqn-embl/NA2000.DAT:* /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1983.DAT:
/SIDSI/gcgdata/geneseq/geneseqn-embl/NA1983.DAT:
/SIDSI/gcgdata/geneseq/geneseqn-embl/NA1983.DAT:
/SIDSI/gcgdata/geneseq/geneseqn-embl/NA1985.DAT:
/SIDSI/gcgdata/geneseq/geneseqn-embl/NA1986.DAT:
/SIDSI/gcgdata/geneseq/geneseqn-embl/NA1986.DAT:
/SIDSI/gcgdata/geneseq/geneseqn-embl/NA1986.DAT:
/SIDSI/gcgdata/geneseq/geneseqn-embl/NA1989.DAT:
/SIDSI/gcgdata/geneseq/geneseqn-embl/NA1989.DAT: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1992. /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1993. /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1994. /SIDS1/gcgdata/geneseq/geneseqn-emb1/NA1991 /SIDS1/gcgdata/geneseq/geneseqn-emb1/NA1992 /SIDS1/gcgdata/geneseg/genesegn-embl/NA1998 /SIDS1/gcgdata/geneseq/geneseqn-emb1/NA2000

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

				=	c	_	: 0	n		_		
		Description		MOUTTIED DAMES AND	Modified human ann	Modified human and	Vascular anti-coac	Plasmid conto nla	Human cDNA #162 di	Endonexin II comp	Anticoagulant PP4	
											•	
		ID	03010044	00010000	AAC91369	AAC91370	AAN91353	AAN81113	ABX63162	AAN91821	AAN90112	
		DB	, ,	7	22	22	10	σ	25	10	10	
		Match Length DB ID	100	100	981	981	1466	1567	1578	1605	1575	
4	Query	Match	000	2	99.7	99.5	97.7	97.5	97.5	97.5	97.5	
		Score	190	100	977.8	976.2	958.2	956.8	956.8	956.8	926.6	
	Result	NO.		4	7	m	4	'n	9	7	80	

in V/uroki		PAP-I, Homo sapie	Sequence encoding	Sequence encoding	Human lipocortin-V	Lung cancer associ	Toxicologically re	Mouse ischaemic co	Rat sequence diffe	Human annexin V pr	9	Ĥ.	PAP-I-protein C fu	PAP-I-protein C fu	Bovine EST associa	Bovine EST associa	Coding strand of c	Bovine EST associa	cDNA encoding huma	Human cancer assoc	Human cervical can	Human ovarian tumo	Human cDNA #220 di	Human placenta-der	DNA encoding novel	Ž	Gene #3844 used to	cDNA of human plac	Human NOVX polynuc	colo	. Phase-1 Rat CT gen	O		Human lung tumour		Annexin XI gene in
AAA11241	AANBZIU/	AAQ12679	AAN80801	AAN80873	AAN90599	AAF18269	ABZ83344	ABI99289	ABK63699	AB221925	ABZ21926	ABX05088	AAQ12681	AAQ12680	ABX47939		AAN90772	ABX42696	ABS76372	AAC77826	AAH72826	AAZ77514	ABX63220	AAQ02888	AAS93800	73	ABN97346	œ	4	ABQ59306	33	AAC65957		ABL49176	7	AAQ39150
53	, נעב	12	ō	O	10	21	25	24	24	25	25	25	12	12	25	25	10	25	24	21	22	50	25	7	23	24	24	1	25	24	74	7	7.		14	14
1803	φ.	46	46	963	1574	1637	1024	1480	1417	960	2016	847	438	1529	422	409	1326	410	1982	2155	2181	2213	2300	2360	2468	2468	2468	2016	2056	529	989	401	401	401	2305	2311
97.5					•																35.6										•					31,4
				923.6		943.8	882	749.4	727		517.8	495.8	412.2		10	356.2	10		349.4	349.4	349.4	349.4	349.4			œ	ä	•	346.6	319.8	315.2	311	311	311	310.8	307.6
ο, ί	0 :	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	58	30	31	32	33	c 34	32	36	37	38	c 36		41		43	44	45

ALIGNMENTS

Human; annexin; chelation site; nuclear imaging; apoptosis; transplant rejection; ds. Modified human annexin nucleotide sequence, SEQ ID NO: 1. AAC91368 standard; DNA; 981 BP 25-MAY-2000; 2000WO-US14324 99US-0324096 16-MAR-2001 (first entry) (UNIW) UNIV WASHINGTON. WPI; 2001-080465/09. P-PSDB; AAB50863. Tait JF, Brown DS; WO200073332-A1. 01-JUN-1999; Homo sapiens. 07-DEC-2000. AAC91368; RESULT 1 AAC91368

Novel modified annexin useful for imaging vascular thrombi and

~

```
901
                                                                                                                                                                                                                                                                                                    AAC91369;
                                                                                                                              901
                                                                                                                                                                                 961
                                                                                                                                                                                                          961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tait JF,
                                                                                                                                                                                                                                                                                                                                                                                                                         Ношо
                                                                                                                                                                                                                                                                 AAC91369
                                                                                                                                                                                                                                                    RESULT
                         ò
                                                g
                                                                             ò
                                                                                                 g
                                                                                                                              à
                                                                                                                                                       8
                                                                                                                                                                                 ò
                                                                                                                                                                                                       용
                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                GGATTTGATGAGGGGGTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACA 120
                                                                                                                                                                                                                                                                                                                                                                                                                    GGATTTGATGAGCGCCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGCAACTACTCCTTGCTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAG 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCTCAAGCCTGGAAGATGACGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTG 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTAC 660
                                                                                                                                                                                                                                                                                                                            9
                                                           The present sequence encodes a modified annexin having an N-terminal chelation site, which comprises an amino acid extension including a glycine and a cysteine residue. The modified annexin is useful for imaging vascular thrombi or apoptosis which is associated with response to a chemotherapeutic agent or with rejection as a result of transplantation. The modified annexin can effectively chelate a radiouncilde and retain annexin bloactivity. It can be readily prepared in high radiochemical yield and with high radiochemical purity. In contrast to conventional conjugation chemistries that provide a distribution of conjugation products, the modified annexin has a single chelation site remote from the site of biological activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGACTATATCAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTA
                                                                                                                                                                                                                                                                                                                                                                                                         GATGAGGAGAGCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTGGAAAATTTGAAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGGTTCTCCTTCAGGCTAACAGAGCCCTGATGCTGGAATTGATGAAGCTCAAGTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAG
                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                           ö
apoptosis, has N-terminal chelation site comprising amino acid
extension which comprises a glycine and a cysteine residue
                                                                                                                                                                                                                                              tch 100.0%; Score 981; DB 22; Length 981; al Similarity 100.0%; Pred. No. 7.8e-275; 981; Conservative 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                       Sequence 981 BP; 286 A; 187 C; 251 G; 257 T; 0 other;
                                     English.
                                    Page 28-30; 39pp;
                                    Claim 25;
                                                                                                                                                                                                                                                 Match
                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                              Local
                                                                                                                                                                                                                                                             Best Loca
Matches
```

8 6 6 6

셤

ð

ò

6 B 6

```
ö
                                                                                                                                                                   900
                                                                                                                                                                                                                           900
                                                                                                                                                                                                                                                                                   960
721 GAGCAACTACTCCTTGCTGTTGTGAATCTATTCGAAGTATACCTGCCTACCTTGCAGAG 780
                                                                                                                                                                                                                                                                                                                                           960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present sequence encodes a modified annexin having an N-terminal chelation site, which comprises an amino acid extension including a glycine and a cysteine residue. The modified annexin is useful for imaging vascular thrombl or apoptosis which is associated with response to a chemotherapeutic agent or with rejection as a result of transplantation. The modified annexin can effectively chelate a radionchide and retain annexin bloactivity. It can be readily prepared in high radiochemical yield and with high radiochemical purity. In contrast to conventional conjugation chemistries that provide a distribution of conjugation products, the modified annexin has a single
                                                                                                                                                                                                                                                                                                                 ACCTCTCTTTATTCCATGATTAAGGGAGATACATCTGGGGGACTATAAGAAAGCTCTTCTG
                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel modified annexin useful for imaging vascular thrombi and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 22; Length 981;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        apoptosis, has N-terminal chelation site comprising amino a
extension which comprises a glycine and a cysteine residue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       chelation site remote from the site of biological activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; annexin; chelation site; nuclear imaging; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Modified human annexin nucleotide sequence, SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 981 BP; 286 A; 187 C; 251 G; 257 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ouery Match 99.7%; Score 977.8; DB 22;
Best Local Similarity 99.8%; Pred. No. 6.6e-274;
Matches 979; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 26; Page 31-33; 39pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                    CTGCTCTCCGGAGAAGATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGCTCTCCGGAGAAGATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-MAY-2000; 2000WO-US14324.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-0324096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   transplant rejection; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAC91369 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (UNIW ) UNIV WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-080465/09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P-PSDB; AAB50864.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200073332-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-DEC-2000
```

Human; annexin; chelation site; nuclear imaging; apoptosis; transplant rejection; ds.

WO200073332-A1.

saplens

Homo

Modified human annexin nucleotide sequence,

entry)

(first

16-MAR-2001

AAC91370;

ő

SEO ID

```
360
                                                                                                                                                                         480
                                                                                                                                                                                     480
                                                                                                                                                                                                 540
                                                                                                                                                                                                             540
                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                 999
                                                                                                                                                                                                                                                             999
                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                      720
                                                                                                                                                                                                                                                                                                  780
                                                                                                                                                                                                                                                                                                              780
                                                                                                                                                                                                                                                                                                                          840
                                                                                                                                                                                                                                                                                                                                       840
                                                                                                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                                               900
                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                                                                                                                        960
                         120
                                                 180
                                                                         240
                                                                                                300
                                                                                                            300
                                                                                                                         360
                                                                                                                                                 420
                                                                                                                                                            420
 9
            9
                                                                                                                                                                                                GATGAGGAGAGCATCCTGATGACATCCCGAAGTAATGCTCAGCGCCAGGAAATC
                                                         TATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATT
                                                                                                                              GAGCAACTACTCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAG
                                                                                                                                                                                                                                                                                                        ACCCTCTATTATGCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATG
                                                                                                                                                                                                                                                                                                                                ACCICTCTTTATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTG
                                                                                                                                                                                                                                                                                                                                                                                 ACTGGAAAATTTGAAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCT
                                                                                                                                                 ATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGATAT
                                                                                                                                                                         GCCTCAAGCCTGGAAGATGACGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTG
                                                                                                                                                                                                                                                 TTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTAC
                                                                                                                                                                                                                                                                         ATGACTATATCAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTA
                        GGATTTGATGAGGGGGTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACA
                                                                        TCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTA
                                                                                                                                                                                                                                                                                                                                                                                                    981
                                                                                                                                                                                                                                                                                                                                                                                                                981
                                                                                                                                                                                                                                                                                                                                                                                                    CTGCTCTCCGGAGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                         CTGCTCTCCGGAGAAGATGAC
                                                                                                                                                                                                                                     541
                                                                                                           241
                                                                                                                                                            361
                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                         199
                                                                                                                                                                                                                                                                                     199
                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                           901
                                                                                                                                                                                                                                                                                                                                                                                       90
                                                                                                                                                                                                                                                                                                                                                                                                    196
                                                                                                241
                                                                                                                       301
                                                                                                                                                361
                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                             721
                                   61
                                                                                    181
                                                                                                                                   301
                                                                                                                                                                         421
                                                                                                                                                                                    121
                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                               961
                                                 131
                                                                        181
                                                                                                                                                                                                                                                         윱
                                  a
                                               οŽ
                                                          ដ្ឋ
                                                                    ò
                                                                                  a
                                                                                               Q
D
                                                                                                                   õ
                                                                                                                                 යු දු
                                                                                                                                                        셤
                                                                                                                                                                     õ
                                                                                                                                                                                 음
장 영
                                                                                                                                                                                                                     o a o
                                                                                                                                                                                                                                                                       $ B
                                                                                                                                                                                                                                                                                             οy
                                                                                                                                                                                                                                                                                                           8 %
                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                    윱
                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                             8
                        ò
```

ВР

standard; DNA; 981

AAC91370

AAC91370 ID AAC913 XX

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09
                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence encodes a modified annexin having an N-terminal chelation site, which comprises an amino acid extension including a glycine and a cysteine residue. The modified annexin is useful for imaging vascular thrombl or apoptosis which is associated with response to a chemotherapeutic agent or with rejection as a result of transplantation. The modified annexin can effectively chelate a radionuclide and retain annexin bloactivity. It can be readily prepared in high radiochemical yield and with high radiochemical purity. In contrast to conventional conjugation chemistries that provide a distribution of conjugation products, the modified annexin has a single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGATTTGATGAGGGGCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATGAGGAGAGCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATGAGGAGAGCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGATTTGATGAGGGGCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTGGAAAATTTGAAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACTGGAAAATTTGAAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                               l and
acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 22; Length 981;
                                                                                                                                                                                                                                                                                                                           Novel modified annexin useful for imaging vascular thrombi apoptosis, has N-terminal chelation site comprising amino a extension which comprises a glycine and a cysteine residue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     chelation site remote from the site of biological activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 981 BP; 286 A; 187 C; 250 G; 258 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 976.2; DB 22;
Pred. No. 1.9e-273;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                               Claim 27; Page 35-37; 39pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Match 99.5%;
Local Similarity 99.7%;
les 978; Conservative (
                                                                                                                                                                                        2000WO-US14324
                                                                                                                                                                                                                                      (UNIW ) UNIV WASHINGTON
                                                                                                                                                                                                                                                                                         WPI; 2001-080465/09.
P-PSDB; AAB50865.
                                                                                                                                                                                                                                                                 rait JF, Brown DS,
                                                                                                                                                                                        25-MAY-2000;
                                                                                                                                                                                                                01-JUN-1999;
                                                                                                                                                               07-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Loc
Matches
δŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         οχ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
```

```
The vascular anti-coagulating protein (VAC)-alpha encoded by this cDNA is used in the preparation of monoclonal antibodies (WAbs). The VAC-alpha is injected into a host animal, in conjugation with egy keyhole limpet haemocyanin, and the B-cells from the immunised hosts are then fused with myeloma cells. The resultant hybridomas (VAA-8 and VAA-9) produce Abs specific to VAC-alpha. The Abs can be used as immunoassay reagents to detect VAC proteins, as affinity ligands for purifice. of VACs and as medicaments for binding and/or neutralising VAC proteins in vivo. See also AMS19134 and EP-181465.

(Updated on 10-MAR-2003 to add missing OS field.)
                                                                                                                                                                                                                                                                                                                                             71 ACCGGGCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                          384 GGACACCTGAAGAACTGAGGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGCTTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCA
                                                                                                                                                                                                                                                                                                                                                                                    GGACACCTGAAGAACTGAGAGCCATCAAACAAGTTATGAAGAAGAATATGGCTCAAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TEGAAGATGACGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTCAGGCTAACAGAGCCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match 97.7%; Score 958.2; DB 10; Length 1466; Best Local Similarity 99.2%; Pred. No. 4e-268; Matches 963; Conservative 0; Mismatches 8; Indels 0;
                                                                                                Monoclonal antibodies to vascular anti-coagulating proteins hybridomas producing such antibodies.
                                                                                                                                                                                                                                                                        Sequence 1466 BP; 423 A; 291 C; 327 G; 425 T; 0 other;
                                                                                                                                Disclosure; flg 1; 11pp; German
                            (BOEH ) BOEHRINGER INGELHEIM.
                                                                     WPI; 1989-293724/41.
                                                                              P-PSDB; AAP91953
         26-MAR-1988;
                                                Gunther A;
                                                                                                                                                                                                                                                                                                                                                                                                                 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                491
g
                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ο
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                          480
                                                                                                                                                                                                              720
                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                                                                                                                                                   780
                                                                                                                              GAGCAACTACTCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAG
                                                                                                                                                                                                                                                               ACCTCTCTTTATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTG
         ATTECTTCAAGGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATAT
                   GGCTCAAGCCTGGAAGATGACGTGGTGGGGGACACTTCAGGGGTACTACCAGCGGATGTTG
                                                                                                                                                                      TTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTAC
                                                                                                                                                                                                                                                                                            ACCCTCTATTATGCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATG
                                                                                                                                                                                                                                                                                                                                   proteins; hybridomas; B-cells; myelomas;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Vascular anti-coagulating protein-alpha cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualiflers
35..996
                                                                                                                                                                                                                                                                                                                                                                                                                CTGCTCTCCGGAGAGATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /label-vAC-alpha
                                                                                                                                                                                                                                                                                                                                                                                                                             CTGCTCTCCGGAGAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAN91353 standard; DNA; 1466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (updated)
(updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    88DE-3810331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Vascular anti-coagulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             - Homo sapiens
- Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-MAR-2003
10-MAR-2003
30-JUL-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-MAR-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DE3810331-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chimeric
Chimeric
        361
                           361
                                                                421
                                                                                                          481
                                                                                                                                                  541
                                                                                                                                                                                        601
                                                                                                                                                                                                             199
                                                                                                                                                                                                                                 199
                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                                                                                                   961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAN91353;
                                              421
                                                                                        481
                                                                                                                               541
                                                                                                                                                                     601
                                                                                                                                                                                                                                                    721
                                                                                                                                                                                                                                                                                                                                                                                                                196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAN91353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT
                          셤
                                               ð
                                                                q
                                                                                       ð
                                                                                                          g
                                                                                                                                                g
                                                                                                                                                                     ŝ
                                                                                                                                                                                        g
                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                          ŏ
                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                               ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                         ç
                                                                                                                                                                                                                                                                                                                                 ŏ
                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                            g
```

203

130 143

83

250

263

310

323

370

383

430

490

503

550

563

S

ö

81

141 255 315 261 321

381

441 555 501 615 561 675 621 735 681 741 855

Fri

셤 ò g ç g õ qq

ò 요 õ 셤 ò g

```
195
                                                                                                                                                                                                                                                                                                                                                                            201
                                                                                                                                                                                                                                                                                                                                                                                                                                                      375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 binding site, initiation sequence, termination codon and a transcription termination to the placental coagulation inhibitor gene. The polypeptide produced on culturing of transformed host cells exhibits strong anticoagulant activities and is useful for the treatment and prevention of eq thrombosis or disseminated intravascular coagulation in the brain, heart and peripheral blood vessels. (Updated on 10-MAR-2003 to add missing OS field.) (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGTTATGAACTGAAAAAGCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                      CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTAAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTGCTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                        22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                           82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                              CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                             .;
0
                                                                                                                                                                                                                     Length 1567;
                                        region,
                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                            Sequence 1567 BP; 430 A; 332 C; 358 G; 447 T; 0 other;
                                        promoter
                                                                                                                                                                                                                DB 9;
1.1e-267;
ches
                                                                                                                                                                                                                    Score 956.8; DB Pred. No. 1.1e-26
                                                                                                                                                                                                                                               0; Mismatches
                                        sequence comprises a
              English.
                                                                                                                                                                                                                    97.5%;
                                                                                                                                                                                                                                               958; Conservative
              ۶; p;
                                                                                                                                                                                                                                 Similarity
              Page
              Disclosure;
                                                                                                                                                                                                                                                                                                  136
                                                                                                                                                                                                                                                                                                                                                    196
                                                                                                                                                                                                                                                                                                                                                                             142
                                                                                                                                                                                                                                                                                                                                                                                                       256
                                                                                                                                                                                                                                                                                                                                                                                                                                                       316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            928
                                                                                                                                                                                                                                                                                                                                                                                                                               202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    742
                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                    Local
                                                                                                                                                                                                                                                Matches
  ×8×9999999999988
                                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                             ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                    790
                                                                                                                                                      850
                                                                                                                                                                              863
                                                                                                                                                                                                        910
                                                                                                                                                                                                                                 923
                                                                                                                                                                                                                                                                                    983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Recombinant placental coagulation inhibitor - useful for the prevention and treatment of thromboses or disseminated intra-vascular coagulation.
TCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATAT
              CAGGATTTCAAATTGAGGAAACCATTGACGGGAGACTTCTGGCAATTTAGAGCAACTAC
                                                             TCCTTGCTGTGTGTAAATCTATTCGAAGTATACCTGCCTACCTTGCAGACACCTCTATT
                                                                                                                           TCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATT
                                                                                                                                                     ATGCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTTCCAGGA
                                                                                                                                                                 GTGAGATTGATCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTT
                                                                                                                                                                                                                    ATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCCG
                                                                                                                                                                                                                                                                       924 ATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     coagulation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
136.1098
/*tag- a
/label-placental coagulation inhibitor
1568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  coagulation inhibitor; disseminated vascular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Plasmid contg. placental coagulation inhibitor gene
                                                                                                                                                                                                                                                                                                                                                                                                       ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ξ
                                                                                                                                                                                                                                                                                                                                                                                                     AAN81113 standard; DNA; 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        88EP-0102468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 87JP-0037227
87JP-0184428
                                                                                                                                                                                                                                                                                                                                                                                                                                                       (updated)
(updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Suda
                                                                                                                                                                                                                                                                                                             GAGAAGATGAC 981
                                                                                                                                                                                                                                                                                                                           /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Iwasaki A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1988-236733/34.
WPI; 1991-329110/45.
P-PSDB; AAP80511.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (KOWA ) KOWA CO LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EP279459-A.
JP03219875-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAR-2003
10-MAR-2003
12-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-FEB-1987;
23-JUL-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-FEB-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                thrombosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24 - AUG - 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Placental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Saino Y,
                                                                        684
                                                                                                                           744
                                                                                                                                                                              804
                                                                                                                                                                                                                                                                                                             971
                                                                                                                                                                                                                                                                                                                                                                                                                               AAN81113;
                        624
                                                                                                    731
                                                                                                                                                     791
                                                                                                                                                                                                      851
                                                                                                                                                                                                                                864
                                                                                                                                                                                                                                                         911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo
                                                                                                                                                                                                                                                                                                                                                                            RESULT 5
```

FI

```
This invention relates to a combination comprising several CDNAs that are differentially expressed in activated vascular tissue. The invention also discloses a high throughput method for detecting differentially expressed cDNAs in a sample. The CDNAs of the invention may have antiatrenfosclerotic; cytostatic; cardiant; hypotensive; antidiabetic; gynaecological; vasctropic and cerebroprotective activities and may be used in gene therapy. The CDNAs of the invention may be used an a high-throughput methods for detecting differential expression of one or more cDNAs in a sample, or screening several molecules or compounds to identify a molecule or compound that specifically binds a CDNA of the invention. A protein encoded by the CDNA may be used to screen several molecules or compounds to identify a natibody to the protein that can be used to detect a protein in a sample or purify an antial or recombinant protein from a sample. The uncleotides may be useful for diagnosing, staging, treating, or monitoring the progression of treatment of a vascular disease, e.g. atherosclerosis, cancer, coronary retery disease, hypertension, diabetes, pre-eclampsia, ischaemia-repertusion injury, restenosis, or stroke. The cDNAs can also be used for large-scale genetic or gene expression analysis of several new
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Combination for diagnosing, staging, treating, or monitoring the progression of treatment of a vascular disease, e.g. atherosclerosis, comprises several cDNAs that are differentially expressed in activated
                                                                                         Human cDNA #162 differentially expressed in activated vascular tissue.
GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                      CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCCATGATT
                                                                                                                                                                                                                                                                                                                                                                                                                     Human; gene; 88; vascular tissue; cytostatic; atherosclerosis;
cardiant; hypotensive; antidiabetic; gynaecological; vasotropic;
cerebroprotective; gene therapy; vascular disease; cancer; coronary;
artery disease; hypertension; diabetes; pre-eclampsia; restenosis;
ischaemia-reperfusion injury; stroke;
                                                                                                                                                                                                                                                                            BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; Page -; 18pp; English.
                                                                                                                                                                                                                                                                            CDNA; 1578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-JUL-2000; 2000US-222469P. 08-JAN-2001; 2001US-260483P.
                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-110597/10
                                                                                                                                                                                                                                                                            standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2002137081-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (BAND/) BANDMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-JAN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                              25-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
802
                                  916
                                                                      862
                                                                                                      916
                                                                                                                                              922
                                                                                                                                                                                                                                                                          ABX63162
                                                                                                                                                                                                                                                                                                              ABX63162;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   vascular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bandman
                                                                                                                                                                                                                                                       ABX63162
                                                                                                                                                                                                                                        RESULT
                                                                                                                                                                                                                                                                                             ð
                                  윰
                                                                      ò
                                                                                                      8
                                                                                                                                              ð
                                                                                                                                                                             g
```

```
ö
                                                                                                                                                                                                                                                                                       141
                                                                                                                                                                                                                                                                                                                  261
                                                                                                                                                                                                                                                                                                                                            201
                                                                                                                                                                                                                                                                                                                                                                       321
                                                                                                                                                                                                                                                                                                                                                                                                   261
                                                                                                                                                                                                                                                                                                                                                                                                                                                          321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 861
                                                                                                                                                                                                                                                          201
                                                                                                                                                                                                                                                                                                                                                                                                                             381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              921
nucleic acid molecules. Antibodies to the proteins encoded by the CDNAs are useful for diagnosing pre-pathologic disorders, and chronic or acute diseases associated with abnormalities in the expression, embount or distribution of the protein. The present sequence represents a cDNA of the invention that is differentially expressed in activated vascular tissue.

Note: The sequence data for this patent did not form part of the specification, but was obtained in electronic format directly from USPTO at http.seqdata.uspto.gov/sequence.html?DocID=20020137081.
                                                                                                                                                                                                                                 91
                                                                                                                                                                                                                                                           142 ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                      CIGITIANO CICCOGAGGAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                   ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             442 AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              442 GTGGTGGGGGACACTTCAGGGTACTACCAGGGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                                                                                                                                                 ATGCCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                         GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                               ö
                                                                                                                                                                          Length
                                                                                                                                                                                                     Indels
                                                                                                                                              Sequence 1578 BP; 432 A; 335 C; 360 G; 451 T; 0 other;
                                                                                                                                                                         3; DB 25; I
L.1e-267;
                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                          Score 956.8;
Pred. No. 1.1
                                                                                                                                                                                          Pred. No.
                                                                                                                                                                          97.5%;
                                                                                                                                                                 Ouery Match
Best Local Similarity 99.8<sup>1</sup>
Matches 958; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               862
                                                                                                                                                                                                                                                                                       82
                                                                                                                                                                                                                                                                                                                                              142
                                                                                                                                                                                                                                                                                                                                                                                                   202
                                                                                                                                                                                                                                                                                                                                                                                                                               322
                                                                                                                                                                                                                                                                                                                                                                                                                                                          262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         802
       8X888888888X8
                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
```

```
1059
                                                                                                                                                                                                                                                                                                                                                         1119
                                       519
                                                                      579
                                                                                                                                   669
                                                                                                                                                                 759
                                                                                                                                                                                                                              879
                                                                                                                                                                                                                                                              939
                                                                                                                                                                                                                                                                             861
                                                                                                                                                                                                                                                                                            666
                                                                                                                                                                                                                                                                                                                                          981
         459
                        381
                                                       441
                                                                                      501
                                                                                                     639
                                                                                                                    561
                                                                                                                                                   621
                                                                                                                                                                                  681
                                                                                                                                                                                                 819
                                                                                                                                                                                                                 741
                                                                                                                                                                                                                                               801
                                                                                                                                                                                                                                                                                                            921
880 GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                     GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                      GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTGCTTCTCCTTCAGGCTAAC
                                                                                                                    AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                             CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                             GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                            CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                                                                                                                                                                                                                                                          AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC
                        AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                       thromboplastin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
1539..1575
/*tag= a
107..1066
/*tag= b
                                                                                                                                                                                                                                                                                                                                                                                                ВР
                                                                                                                                                                                                                                                                                                                                                                                               standard; DNA; 1575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Anticoagulant; PP4 protein;
                                                                                                                                                                                                                                                                                                                                                                                                                               (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Anticoagulant PP4 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                              25-MAR-2003
01-NOV-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-JUN-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EP318703-A
                                                                                                                                                                                                                                                                                                                          0001
         400
                                                      382
                                                                                      442
                                                                                                     580
                                                                                                                   502
                                                                                                                                    640
                                                                                                                                                   295
                                                                                                                                                                                                                682
                                                                                                                                                                                                                               820
                                                                                                                                                                                                                                               742
                                                                                                                                                                                                                                                                             802
                                                                                                                                                                                                                                                                                            940
                                                                                                                                                                                                                                                                                                            862
                                                                                                                                                                                                                                                                                                                                          922
                                                                                                                                                                                                                                                                                                                                                                                               AAN90112
                                                                                                                                                                                                                                                                                                                                                                                                               AAN90112;
                        322
                                                                                                                                                                                                                                                                                                                                                                                         AAN90112
                                                                                                                                                                                                                                                                                                                                                                                 RESULT
                                                                    g
                                                                                                                                  g
                                                                                                                                                  ò
                                                                                                                                                                 g
                                                                                                                                                                                 ά
                                                                                                                                                                                                a
                                                                                                                                                                                                                ð
                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                          QΩ
                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                 음
                       ŏ
                                      d
                                                      òγ
                                                                                      δ
                                                                                                    d
                                                                                                                   δ
                                                                                                                                                                                                                                               Qγ
                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                            ç
                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                        d
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           339
                                                                                                                                                                                                                                                                                                                                                                                                                                                           219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AFTGTGGCTCTGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG 321
                                                                                                                                                                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGGGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                Recombinant human endonexin II - which inhibits blood coagulation and phospholipase A2 and is used as an antiinflammatory agent
                                                                                                                                                                                                                                                                                                                                                                                                             tch 97.5%; Score 956.8; DB 10; Length 1605; al Similarity 99.8%; Pred. No. 1.1e-267; 958; Conservative 0; Mismatches 2; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1605 BP; 447 A; 337 C; 366 G; 455 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                       hENII is a calcium and phospholipid binding protein. (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                Location/Qualifiers
160..1119
/*tag= a
                                                                             BP
                                                                                                                                                                                                                                                                                                                                                        Claim 1; fig. 1; 13pp; English.
                                                                                                                                                                                                                                                                           (RORE ) RORER INT OVERSEAS INC.
                                                                            AAN91821 standard; DNA; 1605
                                                                                                                                                                                                                                              89EP-0105626.
                                                                                                                                                                                                                                                             88US-0176802
                                                                                                                                                 Placenta; blood coagulation
                                                                                                                                  Endonexin II complete cDNA
                                                                                                            (updated)
(first entry)
                                                                                                                                                                 Homo sapiens (human).
                                                                                                                                                                                                                                                                                                         WPI; 1989-317181/44.
P-PSDB; AAP91021.
                                                                                                                                                                                                                                                                                           Jaye M;
                                                                                                                                                                                                                                              30-MAR-1989;
                                                                                                                                                                                                                                                             31-MAR-1988;
                                                                                                           25-MAR-2003
16-MAR-1990
                                                                                                                                                                                                                             02-NOV-1989
                                                                                                                                                                                                               EP339285-A
                                                                                                                                                                                                                                                                                           Kaplan R,
                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Si
Matches 958;
       982
                                                                                           AAN91821;
                                                                                                                                                                                                                                                                                                                                                                                                                                            22
                                                                                                                                                                                                                                                                                                                                                                                                                                                           160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         202
                                                             RESULT 7
        g
                       ò
                                    셤
                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

850

935

790 875 910

995

NAME OF THE PROPERTY OF THE PR

```
Annexin V; thrombocyte; carrier; thrombus; thrombolytic; fusion protain; urokinase; insect cell; fibrinolysis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               as a carrier molecule to build a thrombus-targeting thrombolytic fusion protein. The protein is the result of expression of a fusion gene (this sequence) comprising the Annexin V gene and a low-molecular urokinase gene, in insect cells. The Annexin V-scu-PA-32 fusion protein, expressed in insect cell strain Tn-5B1-4, has high affinity for active
  CAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTAC
                911 ATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCG
                                                      TCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATT
                                                                                                            ATGCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGA
                                                                                                                                                                             GTGAGATTGATCTGTTTAACATCAGGAGGAGTTTAGGAAGAATTTTGCCACCTCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ù
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       comprises
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualiflers
1..1803
//*tag= a for the stop codons are given at the frote- "no start or stop codons are given at the or 3' ends of the sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Annexin V, which has high affinity for active thrombocytes, is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            new unrombolytic fusion protein for targetting thrombus - fusion of Annexin V and urokinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (SHAN-) SHANGHAI INST BIOCHEMISTRY CHINESE ACAD.
                                                                                                                                                                                                                                                                                                                                                                                                                                              Annexin V/urokinase fusion construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                              AAA11241 standard; DNA; 1803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99CN-0113524
                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                  1056 GAGAAGATGAC 1066
                                                                                                                                                                                                                                                                    971 GAGAAGATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sun J, Yang G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-413098/36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 2; Page 2-4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           P-PSDB; AAY92930
                                                                                                                                                                                                                                                                                                                                                                                                                   25-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unidentifled
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CN1247195-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-MAR-2000
  671
                                                                                                          791
                                                                                                                                                                                                                                                                                                                                                                                        AAA11241;
                                                      731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wu X,
                                                                                                                                                                                                                                                                                                                                      RESULT
                                                                                                                                                                                                                                                                                                                                                              셤
                                                      ò
                                                                              g
                                                                                                          ò
                                                                                                                                  g
                                                                                                                                                                                     a
                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                          g
                                                                                                                                                               ŏ
                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     550
                                                                                                                                                                                                                                                                                                                                                                                                                GAGTAGTCGCTATGGCACAGGTTCTCAGAGGCACTGTGACTGCACTTCCCTGGATTTGATG 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   551 AGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCA 610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATAT 670
                                                                                                                                                                                                                                                                                                                                                                                        70
                                                                                                                                                                                                                                                                                                                                                                                    11 GCGGTGGCCATATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCGGGCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCCACAGATGAGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGAAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTCAGGCTAACAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTC
                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                     Length 1575;
                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                New DNA sequence encoding anticoagulant PP4 protein - and new recombinant protein, vectors, antibodies, etc., useful therapeutically and diagnostically.
                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                        Sequence 1575 BP; 461 A; 322 C; 351 G; 441 T; 0 other;
                                                                                                                                                                                                                                                                                                                                    DB 10;
                                                                                                                                                                                                           DNA sequence encoding anticoagulant PP4 protein. inhibits blood coagulation at the thromboplastin The derived protein is 320 amino acids. (Updated CF-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                                              6
                                                                                                                                                                                                                                                                                                                                  Score 956.6; DB 10
Pred. No. 1.2e-267;
0; Mismatches 9;
                                                                                                                                                                                     Claim 1; table 1; 14pp; German
                                                                                                                                                                                                                                                                                                                                  97.5%;
99.1%;
88EP-0118039
                          87DE-3737239
                                                                                                                                                                                                                                                                                                                                                           962; Conservative
                                                      Ą
                                                                             Grundmann U, Abel KJ,
                                                   (BEHW ) BEHRINGWERKE
                                                                                                       WPI; 1989-166767/23
                                                                                                                                                                                                                                                                                                                                                Similarity
                          03-NOV-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                96
                                                                                                                                                                                                                                                                                                                                                                                                                                         71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           216
                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   969
                                                                                                                                                                                                                                                                                                                                               Best Local
Matches 96
```

ð g ö g g ò 8 ò g õ 8

ò

g

ð g õ 8 à g õ

à

us-09-970-969-1.rng

```
TGAC 1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-FEB-1987;
05-JUN-1987;
                                                                                                                                                                                                                                                                                    sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-FEB-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fujikawa K,
                                                                                                                                                  25-MAR-2003
13-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                        WO8805659-A
                                                                                                                                                                                                                                                                                                                                                                                                                    11-AUG-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           properties
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73
                1797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                      AAN82107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                    Homo
                                                             RESULT 10
                                                                                                                                                                                                                                                                                                                Key
                                                                           AAN82107
                                                                                                                    AND THE LANGUAGE OF THE LANGUA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  οŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Op
                  a
                                                                                         Ω×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1736
                                                                                                                                                                                                                                                    1196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGC 1556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                917
                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           737
                                                                                                                                                968
                                                                                                                                                                               137
                                                                                                                                                                                           257
                                                                                                                                                                                                                                                                                                                                                          317
                                                                                                                                                                                                                                                                                                                                                                                                                   377
                                                                                                                                                                                                                                      GACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAATCTCTGCAGCTTTTAAGAC 197
                                                                                                                      77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCT
                                                                                                                                                                                                                                                                                                                                                                                                                   CTTGAAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACC
                                                                                                                                                                                                                                                                                                                                                                                                                                  TGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TAACAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCAAATTGAGGAAACCATTGACGGGGGAGCTTCTGGCAATTTAGAGCAACTACTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGATCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTTATTCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGA
                                                                                                                    18 CCATATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGGGGGC
                                                                                                                                                                                                                                                                                               ATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGC
                                                                                          Gaps
                                                                                         ö
                                                             Length 1803;
and has the fibrinolytic activity of urokinase
                                                                                       5; Indels
                              Sequence 1803 BP; 495 A; 415 C; 462 G; 431 T; 0 other;
                                                            DB 21;
                                                          Score 956; DB 21;
Pred. No. 2e-267;
0; Mismatches
                                                          97.5%;
99.5%;
                                                                                       959; Conservative
                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           978 TGAC 981
 thrombocytes
                                                                                                                                                                                                                                                                                                                                                                                     1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1677
                                                                                                                                               937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 918
                                                                                                                                                                                                                                                                957
                                                                                                                                                                                                                                                                                                                                                        258
                                                                                                                                                                                                                                                                                                                                                                                                                 318
                                                                                                                                                                                                                                                                                                                                                                                                                                              1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    738
                                                                                                                                                                            78
                                                                                                                                                                                                        897
                                                                                                                                                                                                                                      138
                                                                                                                                                                                                                                                                                               198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1737
                                                            Query Match
                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
 SXS
                                                                                                                    ð
                                                                                                                                               g
                                                                                                                                                                            õ
                                                                                                                                                                                                      g
                                                                                                                                                                                                                                   õ
                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           යි
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ő
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     142 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          72
                                                                                                                                                                                                                          PAP-I; anticoagulant; anti-inflammatory agent; phospholipid; phospholipase A2; disseminated intravacular coagulation; human placenta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human proteins having anticoagulant and antlinflammatory activity -
isolated from biological fluid by anion-exchange chromatographoc media.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A human placenta cDNA library (Clontech) was screened to obtain this sequence. The cDNA does not contain a leader peptide sequence, indicating that PAP-I is probably not constitutively screted. The product binds to phospholipid and inhibits phopholipase A2. The protein can substitute heparin or other anticoagulants in the treatment of disseminated intravascular coagulation, deep vein thrombosis, or other disorders. It also has antiinflammatory
                                                                                                                                                                          PAP-I cDNA from human placenta, used for anticoagulant production
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1454;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1454 BP; 434 A; 280 C; 324 G; 416 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 955.2; DB 9;
Pred. No. 3e-267;
); Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BLA;
                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Carter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page ?; p; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         /product-PAP-I
AAN82107 standard; cDNA; 1454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88WO-US00340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         87US-0011782.87US-0059355.
                                                                                                 (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    al Similarity 99.7
957; Conservative
                                                                                                                                                                                                                                                                            deep vein thrombosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZYMOGENETICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                       13..972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ZYMO) ZYMOGENETICS IN (UNIW) UNIV WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Irani MH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1988-235049/33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        P-PSDB; AAP82317
```

```
Disclosure; Fig 7; 57pp; English.
               /product- PAP-I
                                                                                                                                                                                                                                              97.4%;
                                                                 89US-0459082.
                                                     90WO-US07335
         ĸ
                                                                                                                                                                                                                                                      Best Local Similarity 99,7
Matches 957; Conservative
                                                                              (ZYMO ) ZYMOGENETICS INC
 13..972
/*tag=
                                                                                                      WPI; 1991-222905/30
                                                                                                            P-PSDB; AAR13082
                                                     13-DEC-1990;
                                                                 29-DEC-1989;
                          WO9109953-A
                                        11-JUL-1991
                                                                                          Foster DC;
                                                                                                                                                                                                                                                                                                                                                                                                                               382
                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                           142
                                                                                                                                                                                                                                                                                                                                                                                                       322
                                                                                                                                                                                                                                                                                                                                                    202
                                                                                                                                                                                                                                                                                                                                                                                                                                                         442
  CDS
  셤
                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                           312
                                                                                   372
                                                                                                441
                                                                                                                                                                                                                                                                                                       CIGITIAACAICAGGAAGGAGITIAGGAAGAATTTTGCCACCICTTTATTCCATGATT 921
                                              321
                                                                       381
                                                                                                            432
                                                                                                                         501
                                                                                                                                     492
                                                                                                                                                  561
                                                                                                                                                               552
                                                                                                                                                                                        612
                                                                                                                                                                                                                 672
                                                                                                                                                                                                                                                                                                                    912
                                                                                                                                                                           621
                                                                                                                                                                                                     681
                                                                                                                                                                                                                              741
                                                                                                                                                                                                                                          732
                                                                                                                                                                                                                                                      801
                                                                                                                                                                                                                                                                  792
                                                                                                                                                                                                                                                                               861
                                                                                                                                                                                                                                                                                                                                AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC 981
                                                                                                                                                                                                                                                                                                                                      ATTGTGGCTCTGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                   AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                        TTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTGGAAAATTTGAAAAATTA
                                                                                                                       GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                  AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                    CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                             ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                   GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                               GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                          CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                      PBP;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Phopholipid; binding protein; lipocortin; domain; vitamin K; gla-domain; VKDP; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualiflers
                                                                                                                                                                                                                                                                                                                                                                                                      (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                           AAQ12679 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                     25-MAR-2003
30-SEP-1991
                                                                                                                                                                                                                                                                                                                               922
                                                                                                                                                                                                                                                                                                                                            913
                   202
                                661
                                             262
                                                         253
                                                                      322
                                                                                  313
                                                                                               382
                                                                                                           373
                                                                                                                        442
                                                                                                                                    433
                                                                                                                                                 203
                                                                                                                                                              193
                                                                                                                                                                          299
                                                                                                                                                                                       553
                                                                                                                                                                                                    622
                                                                                                                                                                                                                613
                                                                                                                                                                                                                             682
                                                                                                                                                                                                                                         673
                                                                                                                                                                                                                                                      742
                                                                                                                                                                                                                                                                 733
                                                                                                                                                                                                                                                                              802
                                                                                                                                                                                                                                                                                          793
                                                                                                                                                                                                                                                                                                       862
                                                                                                                                                                                                                                                                                                                  853
                                                                                                                                                                                                                                                                                                                                                                                        AAQ12679;
                                                                                                                                                                                                                                                                                                                                                                                                                         PAP-I.
                                                                                                                                                                                                                                                                                                                                                                RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Key
                                                                                                                                                                                                                                                                                                                                                                     AAQ12679
      유
                   ö
                              쉽
                                            à
                                                        용
                                                                      ò
                                                                               g
                                                                                              ò
                                                                                                       ď
                                                                                                                       ö
                                                                                                                                   음
                                                                                                                                                 ö
                                                                                                                                                           g
                                                                                                                                                                        ò
                                                                                                                                                                                     g
                                                                                                                                                                                                   ò
                                                                                                                                                                                                             g
                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                          윱
                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                     ç
                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                            8
```

```
133 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13 ATGCCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            313 AAGGGAGCTGGAACAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              262 ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGTTGTTCTCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                     DNA sequences encoding hybrid phospholipid-binding proteins (PBP) comprising at least one lipocortin phopholipid binding domain (PBD), e.g. of PAP-I, joined to a gla-domainless vitamin K-dependent protein, e.g. protein C or activated protein C. See AAQ12680-81 for such examples. A human placenta cDNA library was screened using affinity-purified antibody against PAP-I in order to obtain this cDNA. (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                               This sequence, or a fragment of it, is used in the construction of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 1460;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
Recombinant prodn. of hybrid phospholipid-binding proteins comprising lipocortin phospholipid-binding domain and vitamin K-dependent protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1460 BP; 436 A; 280 C; 323 G; 421 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 955.2; DB 12;
Pred. No. 3e-267;
0; Mismatches 3;
```

141 132 201

72 81

261 252 321 312 372 441 432

381

492

```
P-PSDB; AAP80714
                                                                                                                                                                                                                                    274
                                                                                                                                                            81
                                                                                                                                                                      94
                                                                                                                                                                                 141
                                                                                                                                                                                                                214
                                                                                                                                                                                                                         261
                                                                                                                                                                                                                                                                                                 454
                                                                                                                                                                                                                                                                                                                       514
                                                                                                                                                                                                                                                                                                                                                      621
                                                                                                                                                                                           154
                                                                                                                                                                                                     201
                                                                                                                                                                                                                                               321
                                                                                                                                                                                                                                                                   381
                                                                                                                                                                                                                                                                             394
                                                                                                                                                                                                                                                                                        141
                                                                                                                                                                                                                                                                                                            501
                                                                                                                                                                                                                                                                                                                                                                634
                                                                                                                                                                                                                                                                                                                                                                           681
               useful
엄
                                                                                                                                                                                          연
                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                          q
                                                                                                                                                            õ
                                                                                                                                                                      셤
                                                                                                                                                                                ö
                                                                                                                                                                                                     à
                                                                                                                                                                                                               g
                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                     ŏ
                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                   852
                                                                      921
                                                                                                                                                                                                                                                                                                                                                                 台
                        621
                                  612
                                                                 741
                                                                                     801
                                                                                                         861
                                                                                                                                                  981
                                            CGAAGIGIGICICATITICAGAAAGGIGITIGACAAGIACAIGACIAIATCAGGAITICAA 681
                                                                                                                                                                                                                                                                                                                                                                 Falkner
                                                                                                        GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
   ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                         Sequence encoding vascular anticoagulating protein (VAP) VAC-alpha
                                                                                                                                                                                                                                        Vascular anticoagulating protein (VAP) VAC-alpha; anticoagulant; antilflammatory; phospholipase inhibitory.
                                                                                                                                                                                                                                                                                                                                                                 ú
                                                                                                                                                                                                                                                                                                                                                                Stratowa
                                                                                                                                                                                                                                                                                  2, page 160-161"
                                                                                                                                                                                                                                                                                                                                                                Swetly P,
                                                                                                                                                                                                                                                                                  claim
                                                                                                                                                                                                                                                                                                                                                                Bodo G,
                                                                                                                                                                                                                                                                                                                                                     (BOEH ) BOEHRINGER INGELHEIM INT GMBH
                                                                                                                                                                                                                                                                 Location/Qualifiers 35..997 /*tag= a /note="claimed in cla
                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                               Hauptmann R, Maurer-Fogy I, Adolf G, Reutlingsperger CMP;
                                                                                                                                                                                      DNA; 1466
                                                                                                                                                                                                                                                                                                                           87DE-3710369.
87DE-3710364.
87DE-3710430.
                                                                                                                                                                                                                                                                                                                 38WO-EP00266
                                                                                                                                                                                                                                                                                                                                          87DE-3737367
                                                                                                                                                                                                         (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                               WPI; 1988-292861/41
                                                                                                                                                                                     AAN80801 standard;
                                                                                                                                                                                                                                                                                                                           28-MAR-1987;
28-MAR-1987;
28-MAR-1987;
                                                                                                                                                                                                         25-MAR-2003
                                                                                                                                                                                                                                                        Homo saptens
                                                                                                                                                                                                                                                                                                                 26-MAR-1988;
                                                                                                                                                                                                                                                                                                                                          04-NOV-1987;
                                                                                                                                                                                                                                                                                           WO8807576-A
                                                                                                                                                                                                                                                                                                      06-0CT-1988
                                                                                                                                                                                                                                                                       mat_peptide
                                                                                                                                                                                               AAN80801;
                                                                                                                   793
                                                                                                                                      853
                                                                                                                                                 922
                                 553
                                            622
                                                       613
                                                                682
                                                                                     742
                                                                                              733
                                                                                                         803
                                                                                                                                                                                                                              (Glu22).
                                                                                                                                                                                AAN80801
                                                      g
                                                                                            윱
                                                                                                                                     g
                                                                                                                                                                                          8
                                            õ
                                                             ò
                                                                        g
                                                                                    å
                                                                                                       ð
                                                                                                                 g
                                                                                                                                                 ö
                        ð
                                                                                                                             ò
```

```
140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 693
                                                                                                    The DNA is produced by determining the amino acid sequence of isolated and highly purified VAPs, constructing DNA probes on the basis of this sequence, using the probes to search through suitable colnA libraries, isolating cDNA that hybridises with the probes, by inserting the CDNA into a suitable vector, and using the vector to transform a host organism. VAC-alpha has anticoagulant activity under certain conditions, but loses this activity in the event of severe bleeding. It acts by inhibiting conversion of factor X to factor Xa and conversion of prothrombin to thrombin. It is structurally related to lipocortin I (Nature, 320, 77, 1986) and lipocortin II (Cell, 46, 191/120, 1986) and has similar antiinflammatory and phospholipase inhibitory activity. (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGAACTGAGAGCCATCAAACAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACGAAGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATTGAGGAAACCATTGACCGCGGGACTCTGGCAATTTAGAGCAACTACTCCTTGCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21 TATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 1466;
                         etc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1466 BP; 422 A; 289 C; 328 G; 424 T; 3 other;
vascular anti:coagulating proteins -
iul as thrombin inhibitors, antiflammatory agents,
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 954.6; DB 9;
Pred. No. 4.5e-267;
0; Mismatches 4;
                                                                  German.
                                                             Disclosure; Fig 4/1-4/3; 183pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 97.3%;
Best Local Similarity 99.6%;
Matches 957; Conservative 0
```

Gaps

ö

141 120 201 180 261 240 321 300 381

9 8

```
421 Gregregesacartreasseracraceassesarstressesretrecresserace 480
organism. VAC-alpha has anticoagulant activity under certain conditions, but loses this activity in the event of severe bleeding. It acts by inhibiting conversion of factor X to factor Xa and conversion of prothrombin to thrombin. It is structurally related to lipocortin (Nature, 320, 77, 1986) and lipocortin II (Cell, 46, 191/120, 1986) and has similar antilinflammatory and phospholipase inhibitory activity. (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                           GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 ATGCCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                              AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGCCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22 ATGCCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                           ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                           CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CIGTITAACAICAGGAAGGAGITIAGGAAGAATITIGCCACCTCTTTATICCATGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 963;
                                                                                                                                                Indels
                                                                                                   Sequence 963 BP; 284 A; 183 C; 242 G; 254 T; 0 other;
                                                                                                                          DB 9;
                                                                                                                          Score 953.6; DB 9
Pred. No. 7.2e-267
                                                                                                                                                0; Mismatches
                                                                                                                       97.2%;
                                                                                                                                   Local Similarity 99.6
les 956; Conservative
                                                                                                                                                                                                                83
                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                             142
                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                             322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               742
                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                    262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ୍ଧ
  88888888888
                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                      õ
                                                                                                                                                                                                                õ
                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                        윱
                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                            813
                                                                  860
                                                                                         873
                                                                                                              920
                                                                                                                                                         980
                                                                                                                                                                                993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ü
                                                                                                                                                                                                                                                                                                                                                                                            Vascular anticoagulating protein (VAP) VAC-alpha; anticoagulant activity; antiinflammatory; phospholipase inhibitory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The DNA is produced by determining the amino acid sequence of isolated and highly purified VAPs, constructing DNA probes on the basis of this sequence, using the probes to search through suitable cDNA libraries, isolating cDNA that hybridises with the probes, by inserting the cDNA into a suitable vector, and using the vector to transform a host
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Falkner
                                                                                                                                                                     AATTCAGGAAACCATTGACCGCGAGACTTCTGGCCAATTTAGAGCAACTACTCCTTGCTGT
                   GGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGA
                                                                                                             TCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCCACCTCTTTATTCCATGAT
                                                                                                                                                        TAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGA
                                                                                                                                                                                                                                                                                                                                                            Sequence encoding vascular anticoagulating protein (VAP) VAC-alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Stratowa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           etc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           agents,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ď.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Swetly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             vascular anti:coagulating proteins - ful as thrombin inhibitors, antiflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               o,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (BOEH ) BOEHRINGER INGELHEIM INT GMBH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2; Page 160-161; 183pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualiflers
35..963
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bodo
                                                                                                                                                                                                                                                                                 ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              I,
CMP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              87DE-3710309.
87DE-3710364.
87DE-3710430.
87DE-3737367.
                                                                                                                                                                                                                                                                                 963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          88WO-EP00266
                                                                                                                                                                                                                                                                                                                            (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R, Maurer-Fogy
Reutlingsperger
                                                                                                                                                                                                                                                                                 DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1988-292861/41.
P-PSDB; AAP80242.
                                                                                                                                                                                                                                                                                AAN80873 standard;
                                                                                                                                                                                                    C 981
                                                                                                                                                                                                                          994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-MAR-1987;
28-MAR-1987;
28-MAR-1987;
04-NOV-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                              Homo saplens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-MAR-1988;
                                                                                                                                                                                                                                                                                                                           25-MAR-2003
12-SEP-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                              mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              W08807576-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-0CT-1988
                                                                                                                                                                                                                         · U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hauptmann
                                                                                      814
                                          754
                                                                                                             861
                                                                                                                                                       921
                      741
                                                                                                                                                                                                    981
                                                                                                                                                                                                                                                                                                      AAN80873;
                                                                301
                                                                                                                                                                                                                         994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ϋ
                                                                                                                                                                                                                                                                                                                                                                         (Asp22).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Adolf
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim
                                                                                                                                                                                                                                                           RESULT 13
                                                                                                                                                                                                                                                                     AAN80873
                                                                                                                                                                                                                                                                                 셤
                      ò
                                          셤
                                                                ð
                                                                                    g
                                                                                                             ŝ
                                                                                                                                 g
                                                                                                                                                      õ
                                                                                                                                                                            g
                                                                                                                                                                                                    ò
```

360

441 420 501 540

621 900 681

561

99

Aug

Fri

```
1042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          682
                                                                                                                                                                                                                                                                                         802
                                                                                                                                                                                                                                                                                                                                  862
                                                                                                                                                                                                                                                                                                                                                                          922
                                                                                                                                                                                                                                                                                                                                                                                                                                      921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; lung cancer associated protein; neuroprotective; cytostatic; cardioactive; immunomodulatory; muscular active; vulnerary; sastrointestinal, nephrotropic; antlinfective; gynecological; antibacterial; diagnosis; neural disorder; immune disorder; reproductive; proliferative disorder; wound healing; infectious disease; ds.
                                       442
                                                                                                                                                                                                                              621
                                                                                                                                                                                                                                                                      681
                                                                                                                                                                                                                                                                                                               741
                                                                                                                                                                                                                                                                                                                                                      801
                                                                                                                                                                                                                                                                                                                                                                                              861
                                                                                502
                                                                                                    441
                                                                                                                         562
                                                                                                                                             501
                                                                                                                                                                622
                                                                                                                                                                                     561
                     321
                                                            381
                                                                                                                                                                                                                              CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                              862 CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCCATGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                922 AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC
                                                              322 AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                     382 GAACTGAGAGCCATCAAACAAGTTTATGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                 442 GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                         502 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                803 ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                        GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                262 ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 associated polynucleotide sequence SEQ ID 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAF18269 standard; DNA; 1637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200055180-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1043
                                                                                                                                                                 563
                                                                                                                                                                                                                                                                      622
                                                                                                                                                                                                                                                                                                               682
                                                                                                                                                                                                                                                                                                                                                                                                                    923
                                                                                                                                                                                                                                                                                                                                                        742
                                                                                                                                                                                                                                                                                                                                                                                              802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAF18269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 15
AAF18269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                        à
                                                                                                                                                              g
                                                                                                                                                                                     ð
                                                                                                                                                                                                       g
                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                        ŏ
                                                                                                                                                                                                                                                                                                                                                                                              ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                     ò
                                        g
                                                        ŏ
                                                                              a
                                                                                                    ò
                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                    GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841 CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTTATTCCATGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGGGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human lipocortin-V was isolated from a lambda gt10 human peripheral blood lymphocyte cDNA library with rat lipocortin-V cDNA of lambda RLipo V-1 as probe. Lipocortins are anti-inflammatory agents and can be used to treat arthritic, allergic, dermatologic, ophthalmic, and collagen diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                 Human lipocortin cpds. III, IV, V, and VI - used in treatment of arthritic, allergic, dermatologic, ophthalmic and collagen disorders involving inflammatory processes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1574;
                                                                                                                                                                          Human lipocortin-V; lambdaRLipo V-1; anti-inflammatory agent.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 952; DB 10; Length 1
Pred. No. 2.7e-266;
0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1574 BP; 428 A; 334 C; 366 G; 446 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               See also AAP91362, AAN90598, and AAP91363,
                                                                                                                                                                                                                                                                                                                                                                  Browning JL;
                                                                                                                                                                                                                  Location/Qualifiers
complement (143..1102)
/*tag= a
                                                                                           ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 4; fig 4; 32pp; English.
                                                                                          AAN90599 standard; cDNA; 1574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tch 97.0%; al Similarity 99.5%; 955; Conservative
                                                                                                                                                                                                                                                                                                   89EP-0301603.
                                                                                                                                                                                                                                                                                                                        88US-0160866
                                                                                                                                                                                                                                                                                                                                                                  Pepinsky RB,
                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1989-250486/35.
                                                                                                                                                                                                                                                                                                                                           (BIOJ ) BIOGEN INC.
                                                                                                                                                                                                                                                                                                                                                                                              P-PSDB; AAP91363.
                                                                                                                                                                                                                                                                                                                                                              Wallner BP,
                                                                                                                                                                                                                                                                                                   20-FEB-1989;
                                                                                                                                                                                                                                                                                                                        26-FEB-1988;
                                                                                                                                  22-DEC-1989
                                                                                                                                                                                                sapiens
                                                                                                                                                                                                                           mat_peptide
                                                                                                                                                                                                                                                                               30-AUG-1989
                                                                                                                                                                                                                                                           EP330396-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                142
                     922
                                       901
                                                                                                             AAN90599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local
                                                                                                                                                                                              Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                      RESULT 14
AAN90599
                                                                                                                                                                                                                    é
                                                                                                   õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                    ö
                                       8
```

593 GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC 652

```
a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        polynucleotide sequences AAF17982 - AAF18424 encode human lung cancer associated proteins represented in AA58106 - AA58548. Lung cancer associated proteins and polynucleotide sequences, their agonists, and antagonists may have neuroprotective; cytostatic; cardioactive; cardioactive; cardioactive; cardioactive; cardioactive; mannomodulatory; muscular active general; vulnerary; gastrointestinal general; nephrotropic; antiinfective; ginecological; or antibacterial activity. The invention also includes antibodies specific for the protein or polynucleotide sequences. The lung cancer associated polynucleotide sequences may be used for detection of lung cancer, chromosome identification, as chromosome markers, and for numerous other disorders such as neural, immune, muscular, reproductive, gastrointestinal, pulmonary, cardiovascular, reproductive, gastrointestinal, pulmonary, cardiovascular, reproductive, cardisorders The proteins may also be used in the treatment of wounds and peptide AA598549 are used in the course of the invention for the course of the invention for the course of the invention for the course of the course 
                                                                                                                                                                                                                                                                                                                                                                                                                      Lung cancer associated gene sequences, referred to as lung cancer antigens, useful for treatment, prevention, and diagnosis of disorders such as lung cancer .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1637 BP; 455 A; 349 C; 378 G; 450 T; 5 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; Page 746; 1425pp; English.
08-MAR-2000; 2000WO-US05918.
                                                                     99US-0124270.
                                                                                                                                                                                                                                                                                                               WPI; 2000-587514/55
                                                                                                                                       (HUMA-) HUMAN GENC
(ROSE/) ROSEN C A.
                                                                                                                                                                                                                                                                                                                                                    P-PSDB; AAB58393.
                                                                     12-MAR-1999;
                                                                                                                                                                                                                                                 Ruben SM;
```

Ouery Match

Best Local Similarity 99.6%; Pred. No. 6.6e-264;
Matches 956; Conservative 0; Mismatches 3; Indels 1; Gaps

22 ATGGCACAGGTTGTCAGAGGCACTGTGACTGCAGGATTGATGATGATGATARA

```
ATGTGGCTCTGATGAACCCTCTCGGCTTTATGATGCTTATGAACTGAACATGACTTG 321
                                                                                                                                                                                                         ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG 472
                                                                                                                                                                                                                              AAGGGACCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA 381
                                                                                                                                                                                                                                                                                       GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC 501
           CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                      AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                           382 GAACTGAGGGCCATCAAACAAGTTTATGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                  233
                                                                                                                                                                                                                                                                                                                       442
                                            82
                                                                                        142
                                                                                                              293
                                                                                                                                                                                                        413
                                                                                                                                                                                                                              322
                    9
                                            ò
                                                                 a
                                                                                                           g
                                                                                                                                    ò
                                                                                                                                                         셤
                                                                                                                                                                                                   셤
                                                                                        ö
                                                                                                                                                                                ö
                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                          ð
```

δ	502	AGAGACCCTGATGCTGGAATTGATGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT	561
QQ	653	AGAGACCCTGATGCTGGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTAATTT	712
vo	562	CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA	621
qq	713	CAGGCTGCAGAACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTTGGAACA	772
Qy	622	CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA	681
qq	773	CGAAGTGT-NCTCATTTGAGAAAGGTGTTTGACAAGTACATGATATATCAGGATTTCAA	831
φ	682	ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTTCTTGCTGTT	741
QΩ	832	ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGT	891
ολ	742	GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCCTCTATTATGCTATGAAG	801
qq	892	GIGAAAICIATICGAAGTATACCTGCCTACCTTGCAGAGACCCCTCTATTATGCTATGAG	951
oy.	802	GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT	861
qa	952	GGAGCTGGGACAGATGATACCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT	1011
Qy	862	CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT	921
QΩ	1012	CIGITIAAACATCAGGAAGGAGTITAGGAAGAATTITGCCACCTCTTTATTATGAAGGATT	101
οy	922	AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC	981
QΩ	1072	AAGGGAGATACATCTGGGGGACTATAAGAAAGCTCTTCTGCTTGTTGTGGAGAAGATGAC	1131

Search completed: August 28, 2003, 16:03:33 Job time: 220.333 secs

Н

```
(without alignments)
7825.244 Million cell updates/sec
                                                                                                                                                             US-09-970-969-5
981
1 atggcatgtggctgcggtca.....tgctctccggagaagatgac 981
                                                                                              ; Search time 55.3333 Seconds
5.1.6
Compugen Ltd
                                                                                                                                                                                                                                                                                                        hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                           569978 seqs, 220691566 residues
 version - 2003 (
                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                              - nucleic search, using sw model
                                                                                              August 28, 2003, 15:49:00
                                                                                                                                                                                                                            IDENTITY_NUC Gapop 10.0 , Gapext 1.0
 GenCore
Copyright (c) 1993
                                                                                                                                                                                                                                                                                                                                         length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                            Total number of
                                                                                                                                                            Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                       Minimum DB seq
Maximum DB seq
                                                                                                                                                                                                                              Scoring table:
                                                                OM nucleic
                                                                                                                                                                                                                                                                           Searched:
                                                                                             Run on:
```

/cgn2_6/ptodata/2/ina/5A_COMB.seq:*
/cgn2_6/ptodata/2/ina/5B_COMB.seq:*
/cgn2_6/ptodata/2/ina/6A_COMB.seq:*
/cgn2_6/ptodata/2/ina/6B_COMB.seq:*
/cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
/cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*

Issued_Patents_NA:*

Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	Sequence 5, Appli	1 Sequence 1	Sequence	D.	Sequence 2	Sequence 4,	Sequence 261	1 Sequence 261,	1 Sequence 261,	1 Sequence 261,	Sequence 1, Ar		7 Sequence 747	721,	625,	Sequence 491,	1 Sequence 481	Sequence 17,	Sequence 306	Sequence	1 Sequence 21,	Sequence 188,	Sequence 20, P	Sequence 14,	L23 Sequence 123, App	Segmence 106
SUMMARIES	QI	US-09-324-096A-5	US-09-324-096A-	US-09-324-096A-3	5225537-3	US-08-125-746-2	US-08-125-746-4	US-09-643-597-261	US-09-480-884A-26	US-09-542-615A-26	US-09-606-421B-26	US-08-526-136-1	US-08-526-136-3	US-09-620-312D-74	US-09-328-111-7	US-09-328-111-6	US-09-328-111-49	US-09-328-111-48	US-09-325-932A-1	US-09-385-982-306	US-09-328-111-4	US-09-325-932A-2	US-09-641-638-188	US-09-325-932A-20	US-08-232-463-14	US-09-641-638-12	US-09-641-638-106
	DB	4	4	4	9	-	7	4	4	4	4	m	m	4	m	m	٣	٣	4	m	m	4	4	4	Т	4	7
	Query Match Length	981	981	981	1460	1567	957	401	401	401	401	2305	2311	1793	644	502	630	501	1293	643	543	704	1001	789	7218	1001	1001
æ	Query	100.0	99.5	99.5	97.5	97.5	97.2	31.7	31.7	31.7	31.7	31.7	31.7	13.7	12.6	9.8	9.8	9.5	9.0	7.6	7.1	7.1	6.2	6.1	5.0	4.8	4.6
	Score	981	976.2	976.2	956.8	956.8	953.8	311	311	311	311	310.8	310.8	134.6	123.6	96.6	9.96	93.6	88.2	₹	9.69	69.4		59.6	49.4	47.4	44.8
	Result No.	-	7	٣	4	ស	9	7	80	6	10	11	12	13	c 14	c 15	c 16	c 17	18	c 19	20	21	22	23	c 24	25	56

Appl Appl Appl Appl Appl Appl Appl Appl			0;	60	120	180	240 240	300	360
24, Ap. 1156, Ap. 1156, Ap. 1156, Ap. 1101, Ap		SITES	Gaps	TCCCT CCCT	GCACA 	AAATC	AACTA 	ATGCT	AAATT
Sequence Seq		ENDOGENOUS CHELATION S	Length 981; Indels 0;	ACTGTGACTGACT	NTGAAAGGCTTGG NTGAAAGGCTTGG	SCTCAGCGCCAGG	SACCTGAAATCAG 	CTCGCCTTTATG	aagtactgacag \aagtactgacag
US-09-451-651-24 US-08-594-031-156 US-09-641-638-81 US-09-641-638-202 US-09-641-638-202 US-09-536-784-33 US-08-961-083-33 US-08-961-527-108 US-08-340-426D-101 US-08-340-426D-101 US-08-350-101 US-08-350-101 US-09-252-991A-5395 US-09-252-991A-5409 US-09-252-991A-5409 US-09-252-991A-5409 US-09-252-991A-5409 US-09-252-991A-5409 US-09-252-991A-5409	ALIGNMENTS	ISSULT 1 IS-09-324-096A-5 Sequence 5, Application US/09324096A Patent No. 6323103 GENERAL INFG832103: APPLICANT: Tait, Jonathan APPLICANT: Tait, Jonathan APPLICANT: Tait, Jonathan APPLICANT: Brown, David TITLE OF INTENTION: ANNEN: US/09/324,096A CURRENT APPLICATION NUMBER: US/09/324,096A CURRENT FILING DAPE: 1999-06-01 NUMBER OF SEQ ID NOS: 12 SOFTWARE: Patentin version 3.0 LENGTH: 981 TYPE: DNA ORGANISM: HOMO Sapiens FEATURE: NAMEXEX: CDS LOCATION: (1)(981)	Score 981; DB 4; L Pred. No. 6.4e-291; 0; Mismatches 0;	ATGCCATGTGCCTGCGGTCATATGCCACAGGTTCTCAGAGGCACTGTGACTGAC	GGATTTGATGAGCGGGCTGATGCAGAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACA 	GATGAGGAGAGCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATC 	TCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTA 	actggaaaatttgaaaattaattgtggctctgatgaaaccttctcgctttatgatgct 	TATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATT
4 H 4 4 4 M 4 7 7 7 7 7 7 7 7 4 4 4 4 4 4 4		/0932 IN DE B41 R: US 9-06- n 3.(60.	GGTC	GCTC	CTG.	ACTO	A = A	000
215 212 212 212 1001 1001 11309 278 278 278 278 278 278 278 278 278 278		10n US/ nathan David ANNEXI W-1-138 WOMBER S: 12 S: 12 version	vat	recerso recerso	rgagegg rgagegg	SAGCATC 	TTTTAAG TTTAAG	ATTTGAA 	SAAACAT
44444៤២២២២២២២២២២២២២២ ២០០០១០១៩៩៩២២២២២២២២		SULT 1 Sequence 5, Application Patent No. 632313 GENERAL INFORMATION: APPLICANT: Tait, Jonath APPLICANT: Tait, Jonath TTLE OF INVERTION: DAVI TTLE OF INVERTION: DAVI TTLE OF INVERTION: DAVI CURRENT APPLICATION NUM CURRENT FILING DATE: 1 NUMBER OF SEQ ID NOS: 1 SOFTWARE: Patentin vers SOFTWARE: DAA TYPE: CAS LENGTH: 981 TYPE: DAA TYPE: CAS LENGTH: 981 TYPE: CAS TYPE:	Match Local Similarity es 981; Conser	ATGGCATG: ATGGCATG:	GGATTTGA' GGATTTGA'	GATGAGGA(GATGAGGA(TCTGCAGC TCTGCAGC	ACTGGAAA 	TATGAACT FATGAACT
44 44WWW WWWWWW WWWWW WWW WWW WW WW WW W		SSULT 1 Sequence 5, Appli Sequence 5, Appli Sequence 5, Appli Sequence 5, Appli Beach INFORMATI APPLICANT: Brow TITLE OF INVENT: FILE REFERENCE: CURRENT APPLICA CURRENT APPLICA CURRENT APPLICA CURRENT APPLICA CURRENT APPLICA CURRENT BEACH TYPE: NUMBER OF SEQ II SOFWWARE: Patent TYPE: DAA ORCANISM: HOMO FEATURE: LACCATION: (1)	Query Match Best Local S Matches 981	ਜ ਜ	61	121	181	241	301
2200000000000000444444 8001100450000010045		SSULT 1 Sequence Sequence Sequence Sequence In Moderate In Moderate In Applicant Moderate Software Sequence Sequence In Moderate In Moderate In Control Control In Order In O	ery sst 1						
0 000		SEEST OF SEE	OME	QY Db	Qy Dp	Oy Dp	Qy Db	o d	Qy Db
								·	

	Db 1 ATGGCATGTGGCGGTGGCCCATATGGCACAGGTTCTCAGAGGCACTGTGACTTGCCT 60 Ov 61 GGATTTGATGAGCGGGCTGATGCAGAAACTCTTCGGAAGGCTATGGAAAGGCTTGGGCACA 120		QY 121 GATGAGGAGGATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGGGCCAGGAAATC 180	Db 121 GATGAGGAGAGCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGGGCAGGAAATC 180	QY 181 TCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTGGGATGACCTGAAATCAGAACTA 240	Db 181 TCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTA 240 Ov 241 ACTGGAAAAATTGAAAAATTAATTGCCAGGGATCTTGAAGAACCAGAACCA 340	241 ACTGGAAAATTTGAAAATTATGTGGCTCTGATGAAACCCTCTCGGCTTATGATGT	Qy 301 TATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATT 360	Db 301 TATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATT 360	Oy 361 ATTGCTTCAAGGACACCTGAAGAACTGAGGCCATCAAACAAGTTATGAAGAAGAATAT 420.	421 GGCTCAAGCCTGGAAGATGACGTGGGGGGACACTTCAGGGTACTACCAGCGGATGTTG		481 GTGGTTCTCCTTCAGGCTAACAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAA	Db 481 GTGGTTCTCCTTCAGGCTAACAGAGACCCTGATGCTGGAATTGATGAGGTCTGAAGTTGAA 540 OV 541 CAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGACAGATGAAGAAAA 600		Qy 601 TTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTAC 660	Db 601 TTTATCACCATCTTTGGAACACGAAGTGTCTTTTGAGAAAGGTGTTTGACAAGTAC 660	Qy 661 ATGACTATATCAGATTTCAAATTGAGGAAACCATTGACGGGGACTTCTGGCAATTTA 720	721 GAGCAACTACTCCTTGTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAG	721 GAGCAACTACTCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAG 701 ACCTTACTACTTGCTTGTTGTGAAATCTATTCGAAGTATACTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTG	UY /BI ACCCECTATTATGCTATGAAGGAGCTGGGAAAGAAAGAAAGATAATCATACCTCATCAAGAGTATG 840	QY 841 GTTTCCAGGAGTGAGATTGATCTGTTTAACATCAGGAAGGA	Db 841 GTTTCCAGGAGTGAGTTGATCTGTTTAACATCAGGAAGGA		Db 901 ACCTCTTTTATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTG 960	Oy 961 CTGCTCTCCGGAGAGATGAC 981 .	Db 961 CTGCTCCCGGAGAAGATGAC 981	NESULT 3 US-09-324-096A-3		; APPLICANT: Tait, Jonathan
•		Qy 421 GGCTCAAGCCTGGAAGATGACGTGGGGGGACACTTCAGGGTACTACCAGCGGATGTTG 480	Db 421 GGCTCAAGCCTGGAAGATGACGTGGGGGGACACTTCAGGGTACTACCAGCGGATGTTG 480	QY 4B1 GTGGTTCTCCTTCAGCCTAACAGAGACCCTGAATTGATGAAGACTCAAGTTGAA 540	Db 481 GTGGTTCTCCTTCAGGCTAACAGAGACCCTGATGCTGGAATTGATGATGAAGCTCAAGTTGAA 540	Oy 541 CAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAG 600	TTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTGGAAAGGTGTTTGACAAGTAC	Db 601 TTATCACCATCTTTGGAACACGAAGTGTCTCATTTGAGAAAGGTGTTTGACAAGTAC 660		Db 661 ATGACTATATCAGGATTGAAATTGAGGAAACCATTGACGGGGAGACTTGTGGCAATTTA 720 Qy 721 GAGCAACTACTTGGTGTGAAATGTATTGGAAGTATAGGTAGG	Db 721 GAGCAACTACTCCTTGCTGTAGTAATCTAATCGAAGTATACCTGCCTACCTTGCAGG 780	•	781 ACCCTCTATTATGCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATG	Of GATTCCAGGAGGAGATTCAGGAGGAGGAGGAGGAGGAGTTAGGAGATTTTGCC 900		Db 901 ACCTCTTTATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTG 960	961 CTGCTCTCCGGAGAAGATGAC	Db 961 CTGCTCCGGAGAGATGAC 981	RESULT 2 US-09-324-096A-1 ; Sequence 1, Application US/09324096A ; Patent No. 6323313	GENERAL NO. 0323313 GENERAL INFORMATION: APPLICANT: Tait Jonathan	; APPLICANT: MILE, CONCLOS.; APPLICANT: Brown, David.; TITLE OF INVENTION: ANALYSIN DERIVATIVE WITH ENDOGENOUS CHELATION SITES.; FITE PEPERPRICE: 10050-11-13841	CURRENT APPLICATION UMBER: US/09/324,096A	; NUMBER OF SEQ ID NOS: 12 ; SOFTWARE: PatentIn version 3.0	; SEQ ID NO 1 ; LENGTH: 981	; TYPE: DNA ; ORGANISM: Homo sapiens	; FEATURE: ; NAME/KEY: CDS	; LOCATION: (1)(981) US-09-324-096A-1	Query Match 99.5%; Score 976.2; DB 4; Length 981; Best Local Similarity 99.7%; Pred. No. 1.9e-289; Matches 978: Conservative 0: Mismatches 3: Inhale 0: Cane 0:	1 ATGCCATGTGGCTGCGGTCATATGGCACAGGTTCTCAGAGGCACTGTGACTGAC	

```
840
                                                                                   960
                                                                                                                                                                                                                                                                                                                                                              141
                                                                                                                                                                                                                                                                                                                                                                              132
                                                                                                                                                                                                                                                                                                                                                                                                                192
                                                                                                                                                                                                                                                                                                                                                                                                                                                   252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             492
                                                                 900
                                                                                                    960
                                                                                                                                                                                                                                                                                                                                                                                                                                  261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    612
                                                                                                                                                                                                                                                                                                                                                                                               201
                                                                                                                                                                                                                                                                                                                                         72
                                                                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCTCTCTTTATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTG
                                                                                             AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                           ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                              GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u> AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                 ô
                                                                                                                                                                                                                                                                                        1460;
                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                  1.1e-283;
les 2;
                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                   HYBRID
                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                       Score 956.8;
Pred. No. 2.
                                                                                                                                                                                                   PRODUCING
                                                                                                                                                                                      APPLICANT: FOSTER, DONALD
TITLE OF INVENTION: METHODS FOR PRODI
PHOSPHOLIPID-BINDING PROTEINS
NUMBER OF SEQUENCES: 14
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/459,082
FILING DATE: 29-DEC-1989
                                                                                                                      981
                                                                                                                                      981
                                                                                                                      CTGCTCTCCGGAGAAGATGAC
                                                                                                                                CTGCTCTCCGGAGAAGATGAC
                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                         97.5%;
                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                              LENGTH: 1460
                                                                                                                                                                                   :Patent No. 5225537
                                                                                                                                                                                                                                                                                         Query Match
Best Local Simil
Matches 958; C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        313
                                                                                                                                                                                                                                                                                                                           22
                                                                                                                                                                                                                                                                                                                                            13
                                                                                                                                                                                                                                                                                                                                                              82
                                                                                                                                                                                                                                                                                                                                                                              73
                                                                                                                                                                                                                                                                                                                                                                                                142
                                                                                                                                                                                                                                                                                                                                                                                                                 133
                                                                                                                                                                                                                                                                                                                                                                                                                                   202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    553
                                781
                                                                  841
                                                                                   901
                                                                                                    901
                                                                                                                      961
                                                 841
                                                                                                                                     961
                                                                                                                                                                 RESULT 4
5225537-3
                                                                                                                                                                                                                                                                        5225537-3
                                                                                                                                                                                                                                                       SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                ò
                                                              g
                                                                                  ŏ
                                                                                                 QQ
                                                                                                                     ò
                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                            쉽
                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ĝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qγ
                                                                                                                                                                                 ô
                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     840
                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             099
                                                                                                                                                                                                                                             GATGAGGAGGAGCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATC 180
                                                                                                                                                                                                                                     GGATTTGATGAGGGGCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACA 120
                                                                                                                                                                                                                   9
                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGACTATATCAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGCAACTACTCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGGTTCTCCTTCAGGCTAACAGAGCCCTGATGCTGGAATTGATGAAGCTCAAGTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAAGAIGCTCAGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCCTCTATTATGCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATG
                                                                                                                                                                                                            ACTGGAAAATTTGAAAAATTAATGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                         GCTCAAGCCTGGAAGATGACGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241 ACTGGAAAATTTGAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCT
                                                                                                                                                                                                                                                                                                                                                                             TATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                ATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATAT
                                                                                                                                                                                                  Gaps
                                SITES
                                CHELATION
                                                                                                                                                                                 ö
                                                                                                                                                                981;
                                                                                                                                                                Length
                                                                                                                                                                                 Indels
                               ENDOGENOUS
                                                                                                                                                               Score 976.2; DB 4;
Pred. No. 1.9e-289,
0; Mismatches 3;
TITLE OF INVENTION: DAVIG

FILE REFERENCE: UOFW-1-13841

CURRENT APPLICATION NUMBER: US/09/324,096A

CURRENT FILING DATE: 1999-06-01

NUMBER OF SEQ ID NOS: 12

SOUTHARE: Patentin version 3.0

SEQ ID NO 3

LENGTH: 981
                                                                                                                                                              ch
11 Similarity 99.7%;
978; Conservative
                                                                                                  TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                           ; NAME/KEY: CDS
; LOCATION: (1) ..(981)
US-09-324-096A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                  -4
                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                Query Match
                                                                                                                                                                        Local
                                                                                                                     FEATURE:
                                                                                                                                                                        Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                 8
                                                                                                                                                                                                                g
                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                     음
                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
```

255

195 141 315

375

261

201

```
CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                   256 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                              262 ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                 22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGGGGGCTGAT
                                                                                                                                                                                                                                     GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  796 ATTGAGGAAACCATTGACGGGGGGGCTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTGAGGAAACCATTGACCGCGAGACTTCTGCCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                         Length 1567;
                                                                                                                                                     Indels
                                                                                                                        Score 956.8; DB 1;
Pred. No. 2.1e-283;
0; Mismatches 2;
                         TOPOLOGY: unknown
MOLECULE TYPE: DNA (genomic)
                                                                                                                         97.5%;
                                                                                                                                                     Conservative
               unknown
                                                                  CDS
136..1095
nucleic acid
                                                                                                                    Query Match
Best Local Similarity
Matches 958; Conserv
            STRANDEDNESS:
                                                                HAME/KEY:

COCATION:

US-08-125-746-2
                                                                                                                                                                                                                                                             196
                                                                                                                                                                                                                                                                                         142
                                                                                                                                                                                                                                                                                                                                                                         316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        856
                                                                                                                                                                                                                                    82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9/9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          862
                                                      FEATURE
                                                                                                                                                                                                        g
                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                      요
                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                        852
                                                                                                                                                                                                                                                             912
                                                                                                                                                                                                                                                                                                      681
                                                                   741
                                                                                                                         801
                                                                                                                                                                                                                                    921
                                                                                                                                                  GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG 792
                                                                                                                                                                             861
                                                                                                                                                                                                                                                                                       922 AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC 981
                                                                CGAAGTGTCTCTCATTGAGAAAGGTCTTGACAAGTACATGACTATATCAGGATTTCAA
                           GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                             GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                           CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCCATGATT
                                                                                                                                     MAIER & NEUSTADT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3: P.C.
1755 S. Jefferson Davis Highway, Suite 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/125,746
FILING DATE: 24-SEP-1993
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: SAINO, YUSHI
APPLICANT: IMASAKI, AKIO
APPLICANT: SUDA, MAKOTO
TITLE OF INVENTION: ANTICOAGULANT POLYPEPTIDE
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PALOR APPLICATION DATA
PRICE APPLICATION NUMBER: US 07/807,623
FILING DATE: 13-DEC-1991
PRIOR APPLICATION NUMBER: UP 037227/1987
FILING DATE: 20-FEB-1987
PRIOR APPLICATION NUMBER: JP 184428/1987
APPLICATION NUMBER: JP 184428/1987
ATTORNEY/AGENT INFORMATION:
NAME: Oblon, NO. 5591633man F.
REGISTRATION NUMBER: 24,618
REFERENCE/DOCKET NUMBER: 24,618
REFERENCE/DOCKET NUMBER: 80-074-0 DIV
                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2, Application US/08125746
Patent No. 5591633
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: (703) 413-220
TELEFAX: (703) 413-220
TELEX: 248855 OPAT UR
INFORMATION FOR SEO ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1567 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE: Virginia COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Arlington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
STREET: 17
CITY: Arli
                                                                                                                                                                                                                                                                                                                                                                      US-08-125-746-2
                                                                                                                       742
                                                                                                                                                                                                       793
                                                                                                                                                                                                                                  862
                                                                                                                                                                                                                                                            853
                                                                                                                                                  733
                                                                                                                                                                             803
                                                                                                                                                                                                                                                                                                                                                         RESULT 5
                                                                                       g
                                                                                                                                                음
                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                           g
                                                                à
                                                                                                                     ò
                                                                                                                                                                            ð
                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                90
```

495

381

441

615

561 675 621 735 681 741 855 801 915 861 921

501

435

유

ö

```
9
                                                                                                                                                                                                                                                                                                                                                                                                                                         684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                     384
                                                                                                                                                                                                                                                                                                                  GACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTTCAG 564
                                                                                                                                                                                                                                                                                                                                                                             GCTGGACAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACACGA 624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAGGGA 804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    264
                                                                                                                                                                301 GGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAAGAA 360
                                                                                                                                                                                              444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     865 TTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATTAAG 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                925 GGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC 981
                                                                                           GGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAAGAA
                                                                                                                                                                                                                                                                                                                                    GACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGATCTG
                                 GTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTTGTG
                  GTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTGAAG
                                                                                                                                                                                              385 CTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        THE THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        METHODS FOR LUNG CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Skeiky, Yasir A.W.
APPLICANT: Henderson, Robert A.
APPLICANT: McNeill, Patricia D.
TITLE OF INVENTION: COMPOSITIONS AND
TITLE OF INVENTION: AND DIAGNOSIS OF
FILE REFERENCE: 210121.455C11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 261, Application US/09643597
Patent No. 6426072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bangur, Chaitanya S
Hosken, Nancy
Fanger, Gary R.
Li, Samuel X.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kalos, Michael D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wang, Tongtong
Fan, Liqun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wang, Aijun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-643-597-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
                                                                                                                                     325
               205
                                                                                                                                                                                                                                                        445
                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                  505
                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                             265
                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                         625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                             ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                         ò
                                                                                                   셤
                                                                                                                                     ò
                                                                                                                                                                g
                                                                                                                                                                                                                         dd
                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                     쉽
                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                             φ
                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                       Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
               144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 GAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACTCTG 120
AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTGCTCCGGAGAGATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGCATCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGGGGGCTGATGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 957;
                                                                                                                                                                                                                                       ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                             ADDRESSEE: P.C. OFLVAK, MCCLELLAND, MAIER & NEUS STREET: 1755 S. Jefferson Davis Highway, Suite 400 STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 953.8; DB 1;
Pred. No. 1.4e-282;
0; Mismatches 2;
                                                                                                                                            APPLICANT: SAINO, YUSHI
APPLICANT: IMASAKI, AKIO
APPLICANT: SUDA, MAKOTO
APPLICANT: SUDA, MAKOTO
TILE OF INVENTION: ANTICOAGULANT POLYPEPTIDE
NUMBER OF SEQUENCES: 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Oblon, No. 5591633man F.
REGISTRATION NUMBER: 24,618
REFERENCE/DOCKET NUMBER: 80-074-0 DIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/807,623
FILING DATE: 13-DEC-1991
PRIOR APPLICATION DATA:
FILING DATE: 20-FEB-1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 184428/1987
FILING DATE: 23-JUL-1987
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/08/125,746
FILING DATE: 24-SEP-1993
                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                   Sequence 4, Application US/08125746
Patent No. 5591633
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ix: unknown
TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEX: (703) 413-2220
TELEX: 248855 OPAT UR
INFORMATION FOR SEQ ID NO: 4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (703) 413-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           : 957 base pairs
nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
                                                                                                                                                                                                       NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 955; Conserv
                                                                                                                                                                                                                                                                                                                 U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRANDEDNESS:
TOPOLOGY: unkr
MOLECULE TYPE: I
                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                              22202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEPHONE:
                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                        RESULT 6
US-08-125-746-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-125-746-4
922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
```

ò

```
; LOCATION: (1)...(401); OTHER INFORMATION: n = A,T,C or G US-09-542-615A-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 99.4%;
Matches 311; Conservative C
                                                                                                                                                                                                                                                                                                                            322 AAGGGAGCTGGAA 334
                                                                                                                                                                                                                                                                                                                                              1111111111111111389 AAGGGAGCTGGAA 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-542-615A-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 261
LENGTH: 401
                                                                                                                                                                                                                                                                  262
                                                                              83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                      . a
                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                             δ
                                                                                                          g
                                                                                                                                        ò
                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                            CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                              22 ATGCCACAGGTTCTCAGAGGCACTGTGACTGCCTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                     209 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCATTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31.7%; Score 311; DB 4; Length 401; llarity 99.4%; Pred. No. 1.2e-85; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                  Length 401;
                                                                                                                                                                                                                 Query Match 31.7%; Score 311; DB 4; Length 40
Best Local Similarity 99.4%; Pred. No. 1.2e-85;
Matches 311; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 261, Application US/09480884A

Sequence 261, Application US/09480884A

Sequence 261, Application US/09480884A

GENERAL NFORMATION:
APPLICANT: Wang, Tongtong
APPLICANT: Fan, Liqun
APPLICANT: Fanger, Gary R.
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY
TITLE OF INVENTION: COMPOUNDS OF LUNG CANCER
FILE REFERENCE: 210121.455C6
CURRENT APPLICATION NUMBER: US/09/480,884A

CURRENT FILING DATE: 2001-08-27

NUMBER OF SOG ID NOS: 330
SOFTWARE: FastSEQ for Windows Version 3.0

SEC ID NO 261

IRNGROUN AND
              CURRENT FILING DATE: 2000-08-21
NUMBER OF SEQ ID NOS: 369
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 261
LENGTH: 401
CURRENT APPLICATION NUMBER: US/09/643,597 CURRENT FILING DATE: 2000-08-21
                                                                                                                                                                       - A,T,C or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           - A, T, C or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      322 AAGGGAGCTGGAA 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   389 AAGGGAGCTGGAA 401
                                                                                                                                     NAME/KEY: misc_feature

; LOCATION: (1)...(401)

; OTHER INFORMATION: n -

US-09-643-597-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: misc_feature LOCATION: (1)...(401)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; LOCATION: (1)...(401)
; OTHER INFORMATION: n -
US-09-480-884A-261
                                                                                           TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 311; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                     142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       329
                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                     õ
                                                                                                                                                                                                                                                                                                                                                                                                                             윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엺
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          208
                 141
                                                                                                 208
                                                                                                                                                                     268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   201
                                                                                                                                                                                                       261
                                                                                                                                                                                                                                         328
                                                                                                                                                                                                                                                                            321
                                                                                                                                                                                                                                                                                                          329 ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81
8
                                                                                                                                                     ATGTGGCTCTGATGAAACCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            142 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                       89 ATGGCACAGGTTCTCAGAGGCACTGNGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                  GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGCATCCTGACT
                                                                                    82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              142 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 401;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Wang, Tongtong
APPLICANT: Fan, Liqun
APPLICANT: Fan, Liqun
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Hosken, Nancy A.
APPLICANT: Hosken, Nancy A.
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAI
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILLE REFERENCE: 210121.455C8
CURRENT APPLICATION NUMBER: US/09/542,615A
CURRENT FILING DATE: 2000-04-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 311; DB 4; L
Pred. No. 1.2e-85;
O; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 261, Application US/09542615A Patent No. 6518256
```

```
a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         οχ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                209 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG 268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             142 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGCCTTCCCTGGATTTGATGAGGGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .,
0
                                                                                                                                                                                                                                                                                       APPLICANT: Enger, Gary R.
APPLICANT: Enger, Gary R.
APPLICANT: Li, Samuel X.
APPLICANT: Wang, Aijun
APPLICANT: Selky, Yasir A.W.
TITLE OF INVENTION: OMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
CURRENT APPLICATION NUMBER: US/09/606,421B
CURRENT FILLING DATE: 2000-06-28
NUMBER OF SEQ ID NOS: 358
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 261
LENGTH: 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 401;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 31.7%; Score 311; DB 4;
Best Local Similarity 99.4%; Pred. No. 1.2e-85;
Matches 311; Conservative 0; Mismatches 2
                                                                                                                                                    US-09-606-421B-261
; Sequence 261, Application US/09606421B
; Patent No. 6531315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                : NAME/KEY: misc_feature

: LCCATION: (1)...(401)

: OTHER INFORMATION: n = A,T,C or G

US-09-606-421B-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 11
US-08-526-136-1
; Sequence 1, Application US/08526136
                                                                                                                                                                                                                                               Kalos, Michael D.
Bangur, Chaitanya S.
Hosken, Nancy
Fanger, Gary R.
Li, Samuel X.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGGGAGCTGGAA 401
                                                          322 AAGGGAGCTGGAA 334
                                                                             111111111111111
389 AAGGAGCTGGAA 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      322 AAGGGAGCTGGAA 334
                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Wang, Tongtong
APPLICANT: Fan, Liqun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                             合
                                                           ò
                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
 õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            965 TGATGAAGCCTGCCTGACAGATCCTGGCCTCCCGCAGCAACGAGCAATCGAGAGCTTTCGGGAGCT 1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           276 GAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTGAAGGGAGCTGGAAC 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   845 GATCAAAGATCTGAAATCTGAACTGTCAGGAAACTTTGAGAAGACAATCTTGGCCCTGAT 904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    396 CAAACAAGTITATGAAGAAGAATATGGCITCAAGCCTGGAAGATGACGTGGTGGGGGGACAC 455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                336 AAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAAGAACTGAGAGCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96 GAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACTCTGTTGACATCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    156 AAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 2305;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 31.7%; Score 310.8; DB 3; Best Local Similarity 58.0%; Pred. No. 3.3e-85; Matches 549; Conservative 0; Mismatches 397;
                                                                                                                                                                                                                                COMPUTER READBLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: THM PS/2 Model 502 or 558X
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: MordPerfect (Version 5.0)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/526,136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    00786/099001
                        al,
                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/214,036
                          et
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
APPLICATION NUMBER: 07/837,775
FILING DATE: February 13, 1992
APPLICATION NUMBER: 07/764,465
FILING DATE: September 23, 1991
ATTORNEY/AGENT INFORMATION:
GENERAL INFORMATION:
APPLICANT: TOWLE, Christine A.
TITLE OF INVENTION: ANNEXIN XI
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
                                                                                                          3: Fish & Richardson
225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30,162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-8906
TELEFAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEX: 200154
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Clark, Paul T. REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                        Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TOPOLOGY: linear
US-08-526-136-1
                                                                                                                                                                                                                ZIP: 02110-2804
                                                                                                                            STREET: 225 F1
CITY: Boston
STATE: Massacl
COUNTRY: U.S.A
                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                            ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGIH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

us-09-970-969-5.rni

```
US-08-526-136-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    456
                                                                                                                                                                                                                                                                                             96
                                                                                                                                                                                                                                                                                                                        731
                                                                                                                                                                                                                                                                                                                                                 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               396
                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ογ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
085 Treassscartreassscreeteretereteretereteresssaaacessarsaaaseae 1144
                                                                                                          205 CCGCCTGGGAACAGATGAGTCCAAGTTCAATGCGATTCTGTGCTCCCGGAGCCGGGCCCA 1264
                                                                                                                                                                                                                                                                                                          812
                                                                                                                                                 635
                                                                                                                                                                                                     695
                                                                                         516 TGGAATTCATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACT 575
                                                                                                                                                                                                                                                    696 TGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTGTGAAATCTATTCG 755
                                                                                                                                                                                                                                                                                                      756 AAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAGGGAGCTGGGACAGA
                                      456 ITCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAACAGAGACCCTGATGC
                                                                                                                                             576 TAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTTGGAACACGAAGTGTGTCTCA
                                                                                                                                                                                                 636 TTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAAATTGAGGAAACCAT
                                                                                                                                                                                                                                                                                                                                                           816 TGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGATCTGTTTAACATCAG
                                                                                                                                                                                                                                                                                                                                                                                                              GAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCCATGATTAAGGGAGATACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1565 AGGGGATTACCGGAAGATTCTGCTGAAGATCTGTGGTGGCAATGAC 1610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 936 TGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: U.S.A.
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55SX
COMPUTER: IBM PS/2 Model 50Z or 55SX
COMPUTER: MOXING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: MOXINGERICAL (VERSION 5.0)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      al
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/08/526,136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/214,036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: TOWLE, Christine A. et TITLE OF INVENTION: ANNEXIN XI NUMBER OF SEQUENCES: 36 CORRESPONDENCE ADDRESSEE: Fish & Richardson STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 07/837,775
FILING DATE: February 13, 1992
APPLICATION NUMBER: 07/764,465
FILING DATE: September 23, 1991
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 3, Application US/08526136
Patent No. 6107089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 225 Franklin S
CITY: Boston
STATE: Massachusetts
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-526-136-3
                                                                                                                                                                                                                                                                                                                                                                                                             918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 12
                                      õ
                                                            g
                                                                                     ò
                                                                                                                음
                                                                                                                                             ò
                                                                                                                                                                 g
                                                                                                                                                                                             ò
                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                      q
                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
```

```
971 TGATGAAGCCTGCCTGATCGAGATCCTGGCCTCCCGCAGCAACGAGCACTCCGGGAGCT 1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1330
                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          695
                                                                                                                                                                                                                                                                                                                                                                    GAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACTCTGTTGACATCCCG 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95
                                                                                                                                                                                                                                                                                                                                                                                                                                             36 CAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGATGCAGAACTCTTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     851 GATCAAAGATCTGAAATCTGAACTGTCAGGAAACTTTGAGAAGACAATCTTGGCCCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTGAAGGGAGCTGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAAGAACTGAGAGCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGACGTGGTGGGGGGACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        516 TGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         636 TITGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAAATTGAGGAAACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 696 TGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTTGTGAAATCTATTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTCAGGGTACTACCAGGGGATGTTGGTGGTTCTCCTTCAGGCTAACAGAGACCCTGATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  576 TAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTTGGAACACGAAGTGTGTCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1271 CCTGGTGGCAGTTTTTAACGAGTATCAGAGGATGACAGGAGGTGACATTGAGAAGAGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                816 TGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGATCTGTTTAACATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        756 AAGTATACCTGCCTACCTTGCAGAGCCCTCTATTATGCTATGAAGGGAGCTGGGACAGA
                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                           Length 2311;
                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                         Score 310.8; DB 3;
Pred. No. 3.3e-85;
0; Mismatches 397;
REFERENCE/DOCKET NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00786/099001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEPHONE: (617) 542-8906
TELEEX: 2001e.
                                                                                                                           ę.
                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 58.0%;
Matches 549; Conservative
                                                                                                     TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 2311
                                                                                                                                                                                 TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                       TOPOLOGY: linear
```

ð

```
1070
                                                                                                                                                                                                                                                       1181
                                                                                                                                                                                                                                                                                                                                                                                             636
                                                                                                                                                                                                                                                                                                                                                                                                                         1182 CAGAACCGTTTCCATGGAGATGCTCAGGTGGCTCTGCTCGGCCTAGCTTCGGTGATCAAG 1241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1242 AACACACCGCTGTACTTTGCTGACAAACTTCATCAAGCCCTCCAGGAAACTGAGCCCAAT 1301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1302 TACCAAGTCCTGATTCGCATCCTTATCTCTCGATGTGAGACTGACCTTCTGAGTATCAGA 1361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        830
                                                                                                                                                                                                                             519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              877 AAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCCATGATTAAGGGAGATACATCT 936
                                                                                                                                                                                   891 GCAGTCTACAAACACAATTTCCAGGTGGAGGCTGTGGATGACATCACATCTGAGACCAGT 950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         831 GTGGACGTGGCCATTGAAATTCTTGCACTCGAACCCCACCCCAGCTGCAGGAGTGCCTG
                                                                                                                                                                                                                                                                                                                                       577 AAATGGGGGACAGATGAAGAAAAGTITATCACCATCTTTGGAACACGAAGTGTGTCTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               637 ITGAGAAAGGIGITIGACAAGIACAIGACIAIATCAGGAITICAAAITGAGGAAACCAIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  697 GACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTTGTGAAATCTATTCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                817 GATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGATCTGTTTAACATCAGG
                                                            GAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAA
                                                                                                                                            CAAGTTTATGAAGAAGATATGGCTCAAGCCTGGAAGATGACGTGGTGGGGGACACTTCA
                                                                                                                                                                                                                             460 GGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAACAGAGACCCTGATGCTGGA
                                                                                                                                                                                                                                                                                                             520 ---ATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTTCAGGCTGGAACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTATACCTGCCTACCTTGCAGAGCCCTCTATTATGCTATGAAGGGAGCTGGGACAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1422 GGGGATTGCCAGTCAGCCTCCTGGCCTTGTGCAGGGCTGAAGAC 1466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Burges, Christopher C.
APPLICANT: Burges, Christopher C.
APPLICANT: Burges, Christopher C.
APPLICANT: Carroll III. Eddle
APPLICANT: Catrol, Theodore J.
APPLICANT: Catio, Theodore J.
APPLICANT: Derti, Adnan
APPLICANT: Ford, Donna M.
APPLICANT: Lewis, Marcia E.
APPLICANT: Monahan, John E.
APPLICANT: MONEL HUMAN GENES AND GENE EXPRESSION
TITLE OF INVENTION: PRODUCTS
TITLE OF INVENTION: PRODUCTS
TITLE OF INVENTION: PRODUCTS
TITLE OF INVENTION NUMBER: US/09/328,111
CURRENT APPLICATION NUMBER: US/09/38,111
EARLIER APPLICATION NUMBER: US/09/06-08
SEARLIER PILING DATE: 1998-06-10
NUMBER OF SEQ ID NOS: 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                937 GGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 721, Application US/09328111
Patent No. 6262333
GENERAL INFORMATION:
APPLICANT: Endege, Wilson O.
APPLICANT: Steinmann, Kathleen B.
APPLICANT: Astle, Jon H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-328-111-721/c
                                                            340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  757
                                                          ò
                                                                                               qq
                                                                                                                                        õ
                                                                                                                                                                             Q
                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δy
                                           711 AAGTCTCTACAGGCAGCACTTTCCGGCAACCTGGAGGATTGTGATGGCTCTGCTGCAG 770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100 GCTATGAAAGGCTTGGGCACAGATGAGGAGCATCCTGACTCTGTTGACATCCCGAAGT 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 160 AATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTG 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         280 CCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTGAAGGGAGGTGGAACAAAT 339
                 876 GAAGGAGITTAGGAAGAATTTTGCCACCTCTTTATTCCATGATTAAGGGAGATACATC 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           531 GCACCCTCAGGACCTTCTTGAACTTCAGCGTGGACAAGGATGCGCAGAGGCTACTGAGG 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    40 GGCACTGTGACTGCTTCCCTGGATTTGATGAGCGGGCTGATGCAGAAACTCTTCGGAAG 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Caps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1793;
                                                                                                                           Indels
                                                                                                 TGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: No. 656962el Nucleic Acids and TITLE OF INVENTION: No. 656962el Nucleic Acids and TITLE OF INVENTION: Polypeptides FILE REFERNCE: 784CIP2B COURENT APPLICATION NUMBER: US/09/620,312D CURRENT FILING DATE: 2000-07-19 PRIOR PLLING DATE: 2000-04-25 PRIOR FILING DATE: 2000-04-25 PRIOR FILING DATE: 2000-01-21 NUMBER OF SEQ ID NOS: 1105 SQPTWARR: PL.FL.genes Version 1.0 SEQ ID NO; 1793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13.7%; Score 134.6; DB 4;
48.0%; Pred. No. 3.1e-31;
tive 0; Mismatches 479;
                                                                                                                                                                                                                                              Sequence 747, Application US/09620312D
Patent No. 6569662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wang, Zhiwei
John Tillinghast
Drmanac, Radoje T
                                                                                                                                                                                                                                                                                                  APPLICANT: Tang, Y. Tom
APPLICANT: Tang, Y. Tom
APPLICANT: Liu, Chenghua
APPLICANT: Asundi, Vinod
APPLICANT: Anno, Jie
APPLICANT: Chen, Reiyan
APPLICANT: Chen, Rui-hong
APPLICANT: Zhao, Qing A.
APPLICANT: Wehrman, Tom
APPLICANT: Wehrman, Tom
APPLICANT: Yang, Yonghong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match 13.7
Best Local Similarity 48.0
Matches 454; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wang, Jian-Rui
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Zhou, Ping
Ma, Yunging
Wang, Dunrui
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-620-312D-747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                          US-09-620-312D-747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: CDS
LOCATION: (435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT
                                                      셤
                                                                                               ç
                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       õ
```

```
280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4
                                                                                                                                                                                                                                                                                                              100
                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                              356 AAATTATTGCTTCAAGGACACCTGAAGAACTGAGGAGCCATCAAACAAGTTTATGAAGAAG 415
                                                                                                                                                                                                                                                                              AATATGGCTCAAGCCTGGAAGATGACGTGGGGGGACACTTCAGGGTACTACCAGCGGA 475
                                                                                                                                                                                                                                                                                                                                        451 AATTIGGACGAGACCTIGAAAAGGNCATTAGGTCAGATACATCAGGACATTITGAACGTT 392
                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGAACAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAG 595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        596 AAAAGTTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACA 655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        656 AGTACATGACTATACAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCA 715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      716 ATTTAGAGCAACTACTCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTG 775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               151 ATGTAGAAAGTGGTTTGAAGACCATCTTGCAGTGCCCCTGAACCGCCCTGCCTTTTG 92
                                                                                                                                                                                                                                                                                                                                                                          TGTTGGTGGTTCTCCCTTCAGGCTAACAGAGCCCTGATGCTGGAATTGATGAAGCTCAAG
                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                 ö
                                                                                                                                                                                 Length 644;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOHNERON THE DESCRIPTION:

APPLICANT: Endege, Wilson O.

APPLICANT: Steinmann, Rathleen E.

APPLICANT: Batle, Jon H.

APPLICANT: Burgess, Christopher C.

APPLICANT: Bushnell, Steven E.

APPLICANT: Cation, Theodore J.

APPLICANT: Cation, Theodore J.

APPLICANT: Cation, Theodore J.

APPLICANT: Cation, Theodore J.

APPLICANT: Ford, Donna M.

APPLICANT: Monchan, John E.

APPLICANT: Monchan, John E.

APPLICANT: Schlegel, Robert

APPLICANT: Schlegel, Robert

TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION

TITLE OF INVENTION: PRODUCTS

FILE REFERENCE: CCD-257 (US)

CURRENT APPLICATION NUMBER: US/09/328,111
                                                                                                                                                                                Score 123.6; DB 3; Length
Pred. No. 4.3e-28;
0; Mismatches 241; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCATGGTTTCCAGGAGTGAGATTGATCT 863
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 721
LENGTH: 644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTGTGGTCACTCGAAGTGAGTTGACCT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 625, Application US/09328111 Patent No. 6262333 GENERAL INFORMATION:
                                                                                             : NAME/KEY: misc_feature

: LCCATION: (1)...(644)

: OTHER INFORMATION: n = A,T,C or G

US-09-328-111-721
                                                                                                                                                                              Query Match
Best Local Similarity 52.6%;
Matches 267; Conservative
                                                              ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -09-328-111-625/c
                                                                                                                                                                                                                                                                                                                                                                                                                                          536
                                                  TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                          476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31
                                                                             FEATURE
                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                쉽
                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
```

```
ô
                                                                                                                                                                                                                                                                                                                                                                               160 AATGCTCAGCGCCAGGAATCTCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTG 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           199 TCAGCACTGAAGTCATCTGGCCACCTGGAGACGGTGATTTTGGGCCTATTGAAG 140
                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACTCTGTTGACATCCCGAAGT 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         259 AATGCACAGAGACAGGATATTGCCTTCGCCTACCAGAGAAGGACCAAAAAGGAACTTGCA 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAAT 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         340 GAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAA 399
                                                                                                                                                                                                                                                                                                                                                40 GGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGATGCAGAAACTCTTCGGAAG 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            139 ACACCTGCTCAGTATGACGCCTCTGAGCTAAAAGCTTCCATGAAGGGGCTGGGAACCGAC 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                         Length 502
                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                       Score 96.6; DB 3;
Pred. No. 7.2e-20;
0; Mismatches 174;
CURRENT FILING DATE: 1999-06-08
EARLIER APPLICATION NUMBER: US 60/088,801
EARLIER FILING DATE: 1998-06-10
NUMBER OF SEQ ID NOS: 850
SOFTWARE: FASTSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Search completed: August 28, 2003, 19:41:19
Job time : 57.3333 secs
                                                                                                                                                                                                                                                         53.68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                400 CAAGTTTATGAAGAA 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19 AGAGTCTACAAGGAA 5
                                                                                                                                                                                                                                                       Ouery Match 9.8
Best Local Similarity 53.6
Matches 201; Conservative
                                                                                                                                      LENGTH: 502
TYPE: DNA
CRGANISM: Homo sapiens
US-09-328-111-625
                                                                                                          SEQ ID NO 625
LENGTH: 502
```

```
August 28, 2003, 15:49:00; Search time 55.333 Seconds (without alignments) 7825.244 Million cell updates/sec
                                                                                                                                                                                                                                      981
                                                                                                                                                                                          US-09-970-969-1
981
1 atggcatgtggcggtggcca......tgctctccggagaagatgac
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                  569978 segs, 220691566 residues
                                                                         - nucleic search, using sw model
                                                                                                                                                                                                                                                                         IDENTITY_NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                seq length: 0
seq length: 200000000
                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                                 Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                              Minimum DB a
Maximum DB a
                                                                            OM nucleic
                                                                                                                                                                                                                                        Sequence:
                                                                                                                                                                                                                                                                                                                                    Searched:
                                                                                                                   Run on:
```

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Sequence 1, Appli Sequence 3, Appli Sequence 5, Appli Sequence 2, Appli Sequence 26, Appli Sequence 261, App Sequence 261, App Sequence 261, App Sequence 261, App Sequence 747, App Sequence 747, App Sequence 747, App Sequence 721, App Sequence 721, App Sequence 721, App Sequence 721, App Sequence 625, App Sequence 611, App Sequence 611, App Sequence 611, App 20, 7 14, 7 123, 106, Description Sequence US-09-324-096A-1 US-09-324-096A-3 US-09-324-096A-5 522553-3 US-08-125-746-2 US-08-125-746-4 US-09-643-597-261 US-09-543-597-261 US-09-542-615A-261 US-09-526-136-1 US-08-526-136-3 US-09-520-3312D-747 US-09-520-3312D-747 US-09-328-111-625 US-09-328-111-491 US-09-328-111-491 US-09-325-932A-17 US-09-328-982-306 US-09-328-111-428 US-09-325-932A-21 US-09-641-638-123 US-09-641-638-106 US-09-641-638-107 SUMMARIES Length Query Match Score Result No. 0000 U O

240 300 300 181 241 241 301 301

a ò

QQ

δ G

Sequence 24, Appl Sequence 156, App Sequence 202, Appl Sequence 201, Appl Sequence 33, Appl Sequence 101, Appl Sequence 1270, Appl Sequence 2395, Appl Sequence 5401, Appl Sequence 5404, Appl Sequence 186,		S CHELATION SITES	Length 981; Indels 0; Gaps 0;	ACTGTGACTGACTTCCCT 60	ATGAAAGGCTTGGGCACA 120 	GCTCAGCGCCAGGAAATC 180 	GACCTGAAATCAGAACTA 240
US-09-451-651-24 US-08-594-031-156 US-09-641-638-81 US-09-641-638-202 US-09-641-638-202 US-09-51-633-33 US-08-961-527-108 US-08-961-527-108 US-08-454-557-101 US-08-450-673C-101 US-08-450-673C-101 US-08-450-673C-101 US-08-450-673C-101 US-08-450-673C-101 US-08-450-673C-101 US-08-450-673C-101 US-09-252-991A-5401 US-09-252-991A-5404 US-09-252-991A-5404 US-09-252-991A-5404	ALIGNMENTS	UULT 1 09-124-096A-1 sequence 1, Application US/09124096A. sequence 1, Application US/09124096A. sequence 1, Application US/09124096A. sextent No. 632313 APPLICANT: Talt, Jonathan APPLICANT: Talt, Jonathan APPLICANT: Talt, Jonathan APPLICANT: BEOWN, DAIL 13841 CURRENT APPLICATION NUMBER: US/09/124,096A CURRENT FILING DATE: 1939-06-01 CURRENT FILING DATE: 1939-06-01 AVMBER OF SEQ ID NOS: 12 SOFTWARE: Patentin Version 3.0 LENGTH: 981 TYPE: DA GRAANISM: Homo sapiens FEATURE: NAMEXEX: CDS LOCATION: (1). (981) 09-324-096A-1	Score 981; DB 4; L Pred. No. 8.3e-284; 0; Mismatches 0;	ATGGCATGTGGCGGTGGCCATATGGCACAGGTTCTCAGAGGCACTGTGACTGAC	GGATTTGATGAGCGGCTGATGCAGAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACA 	GATGAGGAGAGCATCCTGACTCTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATC	TCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTA
215 212 121 1001 1001 1001 640 3640 278 278 278 278 278 278 278 278 278 278		on US/093 athan athan ANVEXIN E 1-1-13841 NUMBER: U 199-06 :: 12 ersion 3.	100.0%; llarity 100.0%; Conservative	GGCGGTGGC	GAGCGGGCT 	AGCATCCTC	TTTAAGACI TTTAAGACI
ааааачийничийничийн кийиии		SGULT 1 -09-324-096A-1 Sequence 1, Application US/09324096A. Patent No. 6323313 GENERAL INFORMATION: APPLICANT: Talt, Jonathan APPLICANT: Erown, David TITLE REFERENCE: UCFW-1-13841 CURRENT APPLICATION UNMBER: US/09/324 CURRENT APPLICATION UNMBER: US/09/324 CURRENT FILING DATE: 1999-06-01 NUMBER OF SEQ ID NOS: 12 SOFTWARE: PATENT VERSION 3.0 LENGTH: 981 TYPE: DNA ORGANISM: HOMO SAPIENS FEATURE: NAME/KEX: CDS LOCATION: (1). (981)	끝	ATGGCATGT 	GGATTTGAT GGATTTGAT	GATGAGGAG 	TCTGCAGCT TCTGCAGCT
44 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		SULT 1 -09-324-096a-1 Patent No. 63231 GENERAL INFORMATI APPLICANT: Talt, APPLICANT: Talt, APPLICANT: APPLICANT: FILE REFERENCE: CURRENT APPLICANT CURRENT APPLICANT SOFTWARE: PATENT APPLICANT: LENGTH: 981 TYPE: DNA ORGANISM: HOMO FEATURE: NAME/KEY: CDS LOCATION: (1)	Match Local as 98		61	121	181
0 000 0		RESULT 1 US-09-324 Sequence Patent Patent APPLIC AP	Query M Best Lo Matches	Qy Db	Qy Db	Qy Dp	Qy Db
				·			

1 ATGGCAGGTGTGGCCATATGGCACAGGTTCTCAGAGGCACTGTGACTGAC	61 GGATTTGATGAGCGGGCTGATGCAGAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACA	Db 61 GGATTTGATGACGGGTTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACA 12	121 GATGAGGAGACATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGGGAAATC 1		TCTGCAGCTTTTAAGACTCTGTTTGGCAGGCATCTTCTGGATGACCTGAATCAGAACTA	241 ACTGGAAAATTTGAAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCT	Db 241 ACTGGAAAATTTGAAAATTAGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCT 30 Oy 301 TATGAACTGAAACATGCCTTGAAGGGACCTGGAAAAAAAA	11111111111111111111111111111111111111	361 ATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAACAAGTTATGAAGAAGAATAT 4	Db 361 ATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATAT 42 Ov 421 GGCTCAAGCCTGGAAGATGACGTGGTGGGGGGACACTTCAGGGTACTACCAGGGGATGTTG 48		Oy 481 GTGGTTCTCCTTCAGGCTAACAGACCCTGATGCTGGAATTGATGAAGGTCAAGTTGAA 54	GIGGTTCTCCTTCAGGCTAACAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAA	OY 541 CARGATGCTCAGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAG 60	601 TITATCACCATCTITGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTAC	DD 601 TTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTAC 66	Oy 661 ATGACIATATCAGGATTTCAAATTGAGGAAACCATTGACGGGAGACTTCTGGGAATTTA 72	721 GAGCAACTACTCCTTGCTGTTGTGAATTCTATTCGAAGTATACCTGCCTACCTTGCAGG 7	Db 721 GAGCAACTACTTGCTGTTGTGAAATCTATTGGAAGTATACCTGCCTACCTTGCAGAG 78	Oy 781 ACCTCTATTATGCTATGAGGGGGCTGGGACAGATGATCATACCTCATCAGAGTCATG 84	Qy 841 GTTTCCAGGAGTGAGATTGATCTGTTTAACATCAGGAAGGA	Db 841 GTTCCAGGAGTGAGATTGATCTGTTTAACATCAGGAAGGA	OY 901 ACCTCTTTATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTG 96	OAT CHOCHTOCARDARDACAC 081	961 CTGCTCCGGAGAAGATGAC 9	RESULT 3 US-09-324-096A-5 ; Sequence 5, Application US/09324096A	nt No. 6323313 Al INFORMATION: LICANT: Tait, Jonathan
361 ATTGCTTCAAGGACACCTGAAGAACTGAGACCATCAAACAAGTTATGAAGAAGAATAT 4	361 AITGCTTCAAGGACACCTGAAGAACTGAGGCCATCAAACAAGFTTATGAAGAAGATAT 4	dy 421 GGCTCAAGCCTGGAAGATGACGTGGGGGAACATTCAGGGFACTACAGGGATGTTG 480 - - - - - - - - - - - - - - - - - -	481 GTGGTTCTCCTTCAGGCTAACAGAGACCCTGATGCTGGAATTGATGATGAGGTCAAGTTGAA	Db 481 GIGGITCTCCTTCAGGCTAACAGACCCTGATGCTGGAAITGATGAAGCTCAAGTIGAA 540	541 CAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAG 6	541 CAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAG 6	OY 601 TTATCACCATCTTTGGAACAGGAGTGTGTCTTTTGAAAAGGTGTTTGACAAGTAC 660	Oy 661 ATGACTATATCAGGATTCCAAATTGAGGAAACCATTGACGGCGAGACTTTA 720	661 ATGACTATATCAGGATTTCAAATTGAGGAAACCATTGACGGGGGGCTTCTGGCAATTTA 7	OY /21 GASCAACTACTCCTGCTGTTGTGAARCTATTCGAAGTATACCTGCCTACCTGCGGGG 780	AGAGTCATG B	Db 781 ACCCTCTATTATGCTATGAGGGAGCTGGGACAGATGATCATACCTCATCAGAGTCATG 840	841 GTTCCAGGAGTGAGATTGATCTGTTTAACATCAGGAAGGA	Db 841 GTTTCCAGGAGTGAGTGATCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTGCC 900 Ov 901 ACCTCGGTTTAATGCCATGATTAAAGAGAAAACATCAGGAACTAAAAAAAGTTTAGGAAGAAGAATGGAGAAGAAGAAAGA	901 ACCTCTTTTATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTTTG 9	Oy 961 CTGCTCCGGAGAAGATGAC 981	Db 961 CTGCTCTCCGGAGATGAC 981	RESULT 2 US-09-324-096A-3) Sequence 3, April Callon OS/03324030A Patent 6 6323313 : GRAFRAL INFORMATION:	APPLICANT: Tait, Jonathan APPLICANT: Brown, David TITLE OF INVENTION: ANNEXIN DERIVATIVE WITH ENDOGENOUS CHELATION SITES			SEQ ID NO		0-s	Query Match Bost Local Similarity 99.8%; Pred. No. 7.5e-283; Matches 979; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	GGGGGTGGCCATATGGCACAGGTTCTCAGAGGCACTGTGACTGAC

Aug

Fri

```
372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           492
                                                                                                                                                                                                                                                                                                                                                132
                                                                                                                                                                                                                                                                                                                                                                 201
                                                                                                                                                                                                                                                                                                                                                                                  192
                                                                                                                                                                                                                                                                                                                                                                                                   261
                                                                                                                                                                                                                                                                                                                                                                                                                  252
                                                                                                                                                                                                                                                                                                                                                                                                                                                      312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             552
           840
                            900
                                            900
                                                             960
                                                                             960
                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                                                                                                     321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                612
                                                                                                                                                                                                                                                                                                              7.5
                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                   13 ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGGGGGTGAT
                                                                                                                                                                                                                                                                                                                                 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTGCTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                              ACCTCTCTTTATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTG
                            22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                               1460;
                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                             Score 956.8; DB 6;
Pred. No. 1.8e-276;
); Mismatches 2;
                                                                                                                                                                           HYBRID
                                                                                                                                                                           PRODUCING
                                                                                                                                                        ; Patent No. 5225537
; Patent No. 5225537
; TILE OF INVENTION: METHODS FOR PRODUCI;
; PHOSPHOLIPD-BINDING PROPELNS
; UNBER OF SEQUENCES: 14
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/459,082
; FILING DATE: 29-DEC-1989
                                                                                               981
                                                                                                                                                                                                                                                                               ő
                                                                                               CTGCTCTCCGGAGAAGATGAC
                                                                                                        CTGCTCTCCGGAGAAGATGAC
                                                                                                                                                                                                                                                             97.58;
                                                                                                                                                                                                                                                                              958; Conservative
                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                   ; LENGTH: 1460
5225537-3
                                                                                                                                                                                                                                                              Query Match
Best Local Si
Matches 958
                                                                                                                961
                                                                                                                                                                                                                                                                                                                                82
                                                                                                                                                                                                                                                                                                                                               73
                                                                                                                                                                                                                                                                                                                                                                  142
                                                                                                                                                                                                                                                                                                                                                                                  133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        382
            781
                                            841
                                                             901
                                                                                               961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              562
                            841
                                                                               901
                                                                                                                                                                                                                             SEQ ID NO:3
                                                                                                                                         RESULT 4
5225537-3
                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                ōλ
                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                   å
                                                                                                                                                                                                                                                                                                                                                                                                                 CD
                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δž
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OP
            셤
                           Q
                                         셤
                                                           ò
                                                                            g
                                                                                               ò
                                                                                                              g
                                                                                                                                                         ö
                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          099
                                                                                                                                                                                                                                             GATGAGGAGAGCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCAGGAAATC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCCTCTATTATGCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATG 840
                                                                                                                                                                          9
                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGATTTGATGAGGCGGCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACA
                                                                                                                                                                                                                                                    ACTGGAAAATTTGAAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGGCTTTATGATGCT
                                                                                                                                                                                                                                                                                                                       TATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATT
                                                                                                                                                                                                                                                                                                                                                          ATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATAT
                                                                                                                                                                                                                                                                                                                                                                                           GCCTCAAGCCTGGAAGATGACGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGGTTCTCCTTCAGGCTAACAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGCAACTACTCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 ATGGCATGTGGCGGTGGCCATATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCT
                                                                                                                                                           Gaps
            SITES
           DERIVATIVE WITH ENDOGENOUS CHELATION
                                                                                                                                                         ö
                                                                                                                                        981;
                                                                                                                                         Length
                                                                                                                                                         Indels
                                                                                                                                      Score 976.2; DB 4;
Pred. No. 2.3e-282;
0; Mismatches 3;
HAPLICANT: Brown, David
TITLE OF INVENTION: ANNEXIN DERIVATIVE WITH E
FILE REPERENCE: UOFW-1-1384, 096A
CURRENT PAPLICATION NUMBER: US/09/324,096A
CURRENT FILING DATE: 1999-06-01
NUMBER OF SEQ ID NOS: 12
SEQ ID NO 5
LENGTHARE: Patentin version 3.0
SEQ ID NO 5
                                                                                                                                       99.58;
                                                                                                                                                Best Local Similarity 99.7
Matches 978; Conservative
                                                                            TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                     ; NAME/KEY: CDS
; LOCATION: (1)..(981)
US-09-324-096A-5
                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                            19
                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                           19
                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                          ð
                                                                                                                                                                                        음
                                                                                                                                                                                                          ç
                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                          윱
                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

ö

à

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              141
                                                                                                                                                                                                                                          255
                                                                                                                                                                                                                                                                                           315
                                                                                                                                                                                                                                                                                                                                 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       915
                                                                                                                                                                                                                                                                   201
                                                                                                                                                                                                                                                                                                                   261
                                                                                                                                                                                                                                                                                                                                                                    262 ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG 321
                                                                                                                                                                                                                                                                                                                                                                                                                      322 AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA 381
                                                                                                                                                                                                                                                                                                                                                                                                                                              495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  921
                                                                                                                                                                  81
                                                                                                                                                                                                                                                                                                                   22 ATGCCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGAGCATCCTGACT
                                                                                                                                                                                                                                          196 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                   CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                    376 ATTGTGGCTCTGATGAACCCTCTCGGCTTTATGATGCTTATGAACTGAAAAAACCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      562 CAGGCTGGAGACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTGAGGAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      796 ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           802 GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           502 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                           Gaps
                                                                                                                                        ö
                                                                                                               Length 1567;
                                                                                                                                        Indels
                                                                                                               Score 956.8; DB 1;
Pred. No. 1.8e-276;
0; Mismatches 2;
                      TOPOLOGY; 'unknown
MOLECULE TYPE: DNA (genomic)
                                                                                                             97.5%;
llarity 99.8%;
Conservative
             unknown
                                                              CDS
136..1095
nucleic acid
                                                                                                                           il Similarity
958; Conserv
TYPE: nucle:
STRANDEDNESS
                                                              NAME/KEY:
                                                                          , LOCATION:
US-08-125-746-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9/9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             622
                                                                                                             Query Match
Best Local (
                                                                                                                                                                                                                   82
                                                                                                                                                                                                                                                                   142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  862
                                                 FEATURE
                                                                                                                                       Matches
                                                                                                                                                                 ò
                                                                                                                                                                                         8
                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                   ŏ
                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                   õ
                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             · 요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                  672
                                                                                                           741
                                                                          921
           681
                                                                                                                                                                                                                                                                 922 AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC 981
     ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                 CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   : P.C.
1755 S. Jefferson Davis Highway, Suite 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC Compatible
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
FILING DATE: US/08/125,746
FILING DATE: 24-SEP-1993
CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MAIER 6
                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: SAINO, YUSHI
APPLICANT: IWASAKI, AKIO
APPLICANT: BUDA, WAKOTO
TITLE OF INVENTION: ANTICOAGULANT POLYPEPTIDE
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, WAIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/807,623
FILING DATE: 13-DEC-1991
PRIOR APPLICATION DATA:
FILING DATE: 20-FEB-1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 20-FEB-1987
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 184428/1987
FILING DATE: 23-JUL-1987
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REGISTRATION NUMBER: 24,618
REFERENCE/DOCKET NUMBER: 80-074-0
MERCOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Oblon, No. 5591633man F. REGISTRATION NUMBER: 24,618
                                                                                                                                                                                                                                                                                                                                                     Sequence 2, Application US/08125746
Patent No. 5591633
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (703) 413-3000
(703) 413-2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEX: 248855 OPAT UR INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1567 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: P.C. STREET: 1755 S. JCITY: Arlington STATE: Virginia COUNTRY: U.S.A. ZIP: 22202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX:
                                                                                                                                                                                                                                                                                                                                         US-08-125-746-2
                                                                                                                                                                                                                                                                                        913
                                                                                                             742
                                                                                                                                     733
                                                                                                                                                              802
                                                                                                                                                                                        793
                                                                                                                                                                                                                 862
                                                                                                                                                                                                                                         853
                                                                                                                                                                                  셤
                               유
                                                           ð
                                                                               음
                                                                                                           ò
                                                                                                                                    셤
                                                                                                                                                             ò
                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                    셤
```

ô 8

```
841 FTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATTAAG 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC 981
                                                                                                                                                                                                                                         421 GTGGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTGGTTCTCCTTCAGGCTAACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGCCTCTGATGAAACCCTCTCGCCTTTATGATGCTTATGAACTGAAACATGAAACATGAAG
                                                                                                                                                       GGAGCTGGAACAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAAGAA
                                                                                                                                                                                       301 GGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAAGAA
                                                                                                                                                                                                                                                                                                                                                              505 GACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTTCAG
                                                                                                                                                                                                                                                                                                                                                                               565 GCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                   625 AGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       745 AAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCCATGATTAAG
                     GTGGGGGGCACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCCTTCAGGCTAACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTGCAGGAGTGAGATTGATCTG
                                                                                       GTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTGAAG
                                                                                                                                                                                                                           CTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     THE THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   METHODS FOR
LUNG CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Henderson, Robert A.
APPLICANT: MCNeill, Patricia D.
TITLE OF INVENTION: COMPOSITIONS AND ITILE OF INVENTION: AND DIAGNOSIS OF PILE REFERENCE: 210121.455C11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 261, Application US/09643597 Patent No. 6426072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kallos, Michael D.
Bangur, Chaitanya S
Hosken, Nancy
Fanger, Gary R.
Li, Samuel X.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Skeiky, Yasir A.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wang, Tongtong
Fan, Ligun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wang, Aijun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-643-597-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
APPLICANT:
                   205
                                                                                                                     241
                                                                                                                                                       325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                     265
                                                                                                                                                                                                                         385
                                                                                                                                                                                                                                                                                           445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                   셤
                                                                                     ò
                                                                                                                8
                                                                                                                                                       ö
                                                                                                                                                                                      g
                                                                                                                                                                                                                         ŏ
                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                           ŏ
                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                 1036 AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTGTGTGGAGAAGATGAC 1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAACTCTTCGGAAGGCTATGAAAGGCTTGGCACAGATGAGGAGAGCATCGTGACTGG 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25 GCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGATGCA
AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97.2%; Score 953.8; DB 1; Length 957; 99.8%; Pred. No. 1.1e-275; ive 0; Mismatches 2; Indels 0
                                                                                                                                                                                                                                                                           MAIER & NEUSTADT,
                                                                                                                                                              APPLICANT: SAINO, YUSHI
APPLICANT: SAINO, ARIO
APPLICANT: SAINO, MAKOTO
TITLE OF INVENTION: ANTICOAGULANT POLYPEPTIDE
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUST
ADDRESSEE: P.C.
STREET: 1755 S. Jefferson Davis Highway, Suite 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                              OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ΔIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROCE APPLICATION DATA:
APPLICATION NUMBER: US 07/807,623
FILING DATE: 13-DEC-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: UP 037227/1987
FILING DATE: 20-FEB-1987
PRIOR APPLICATION NUMBER: JP 184428/1987
FILING DATE: 23-UL-1987
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80-074-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08/125,746
FILING DATE: 24-SEP-1993
CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: ODION, NO. 5591633man F. REGISTRATION NUMBER: 24,618
REFERENCE/DOCKET NUMBER: 80-074
TELECOMUNICATION INFORMATION:
TELEPHONE: (703) 413-3000
                                                                                                                  Sequence 4, Application US/08125746 Patent No. 5591633 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-
SOFTWARE: Patentin Release
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEX: (703) 413-2220
TELEX: 248855 OPAT UR
INFORMATION FOR SEQ ID NO: 4:
                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                957 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: nucleic acid
STRANDEDNESS: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                   CITY: Arima-
STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 Similarity 955; Conserv
                                                                                                                                                                                                                                                                                                                                                                            22202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY:
                                                                                                    -08-125-746-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-125-746-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loca
Matches
                                                                                   RESULT
```

8 à g à

540

600

624

480 564

504

420

300

324

264

360 444

384

999

684

744 720 804 780

864

Q

```
ö
                                                       141
                                                                                                                                                                            208
                                                                                                                                                                                                                                                                                                                                                            148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         268
                                                                                                                                                                                                                                    201
                                                                                                                                                                                                                                                                                    209 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG 268
                                                                                                                                                                                                                                                                                                                                    261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81
                                                                                                                                                          142 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                         89 ATGCCACAGGTTCTCAGAGGCACTGNGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            142 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                  GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22 ATGGCACAGGITCTCAGAGGCACTGTGACTGCCTGCATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ouery Match 31.7%; Score 311; DB 4; L. Best Local Similarity 99.4%; Pred. No. 1.8e-83; Matches 311; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Wang, Tongtong
APPLICANT: Fan, Liquu
APPLICANT: Ralos, Michael D.
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Fanger, Gary R.
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CAN TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CAN CURRENT APPLICATION NUMBER: US/09/542,615A
CURRENT APPLICATION NUMBER: US/09/542,615A
CURRENT FILING DATE: 2000-04-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 9
8-09-542-615A-261
; Sequence 261, Application US/09542615A
; Patent No. 6518256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; LOCATION: (1)...(401)
; OTHER INFORMATION: n = A,T,C or
US-09-542-615A-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              322 AAGGGAGCTGGAA 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              389 AAGGGAGCTGGAA 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Homo saplen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER SOFTWARE: Fas
SOFTWARE: Fas
SEQ ID NO 261
                               22
                                                                                                                               82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
G
                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                         å
                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           269 TTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTGAAATGGGAAAATTTGAAAAATTA 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              149 GCANAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           262 ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22 ATGGCACAGGTTCTCAGAGGCACTGTGACTTCACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                         Query Match 31.7%; Score 311; DB 4; Length 401;
Best Local Similarity 99.4%; Pred. No. 1.8e-83;
Matches 311; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31.7%; Score 311; DB 4; Length 401; 99.4%; Pred. No. 1.8e-83;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 261, Application US/09480884A

Patent No. 6482597
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Wang, Tongtong
APPLICANT: Wang, Tongtong
APPLICANT: Railos, Michael D.
APP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
CURRENT APPLICATION NUMBER: US/09/643,597
CURRENT FILING DATE: 2000-08-21
NUMBER OF SEO ID NOS: 369
SOFTWARE: FRAESEQ FOR WINDOWS VERSION 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: misc_feature
LOCATION: (1)...(401)
OTHER INFORMATION: n = A,T,C or G
                                                                                                                                                                                                                                  NAME/KET: misc_feature

| LCCATION: (1)...(401)

| CTHER INFORMATION: n = A,T,C or G

US-09-643-597-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        389 AAGGGAGCTGGAA 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             322 AAGGGAGCTGGAA 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 31.7
Best Local Similarity 99.4
Matches 311; Conservative
                                                                                                                                                                               ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 8
US-09-480-884A-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-480-884A-261
                                                                                                     SEQ ID NO 261
LENGTH: 401
                                                                                                                                                                                                            FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
```

```
Patent No. 6107089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      . <del>Q</del>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
        208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           142 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               262 ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22 ATGGCACAGGTTCTCAGAGGCACTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Gaps
                                                                                                                                                                                                                                                                                                   APPLICANT: Skeiky, Yasir A.W.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 311; DB 4; Length 40 Pred. No. 1.8e-83; 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: 210121.455C9
CURRENT APPLICATION NUMBER: US/09/606,421B
CURRENT FILING DATE: 2000-06-28
NUMBER OF SEQ ID NOS: 358
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 261
                                                                                                                                                    Sequence 261, Application US/09606421B Patent No. 6531315 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:

NAME/KEY: misc_feature

LOCATION: (1)...(401)

OTHER INFORMATION: n = A,T,C or G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Sequence 1, Application US/08526136
                                                                                                                                                                                          APPLICANT: Wang, Tongtong
APPLICANT: Fan, Liqun
APPLICANT: Ralos, Michael D.
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Hosken, Nancy
APPLICANT: Fanger, Gary R.
APPLICANT: Li, Samuel X.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 31.7%;
Best Local Similarity 99.4%;
Matches 311; Conservative
                                                            322 AAGGGAGCTGGAA 334
                                                                          322 AAGGGAGCTGGAA 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGGGAGCTGGAA 401
                                                                                                                                                                                                                                                                                       APPLICANT: Wang, Aijun APPLICANT: Skeiky, Yasi
                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                              RESULT 10
US-09-606-421B-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 11
US-08-526-136-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           389
                                 쉽
                                                            ð
                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

```
155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    396 CAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGACGTGGTGGGGGACAC 455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96 GAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACTCTGTTGACATCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  156 AAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           276 GAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTGAAGGGAGCTGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          336 AAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAAGAACTGAGAGCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     36 CAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGATGCAGAAACTCTTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 2305;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 31.7%; Score 310.8; DB 3; Best Local Similarity 58.0%; Pred. No. 4.7e-83; Matches 549; Conservative 0; Mismatches 397;
                                                                                                                                                                                                                        COMPUTER READBLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 558X
COMPUTER: IBM PS/2 Model 502 or 558X
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: WordPerfect (Version 5.0)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/526,136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 07/837,775
FILING DATE: February 13, 1992
APPLICATION NUMBER: 07/64,465
FILING DATE: September 23, 1991
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00786/099001
TELEPHONE: (617) 542-5070
TELEPAX: (617) 542-806
TELEFAX: 200154
INFORMATION FOR SEQ ID NO: 1:
SEDURAL CE CHARACTERISTICS:
                         aľ,
                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/214,036
                         ęţ
GENERAL INFORMATION:
APPLICANT: TOWLE, Christine A. e.
TITLE OF INVENTION: ANNEXIN XI
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
CITY: BOSTON
                                                                                                                                                                   Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TOPOLOGY: linear
US-08-526-136-1
                                                                                                                                                                                          COUNTRY: U.S.A.
ZIP: 02110-2804
                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                   STATE: Ma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH:
```

ó

```
96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                AGCAGAGTATAAGCGGCTGTATGGCAAGTCGCTGTACCACGACATCACGGGAGACACTTC 1564
1325 CTGCCGGGAGATGTCCGGGGACCTGGAGCAGGCATGCTGGTGTGAAATGTCTTAA 1384
                                                                                                                                                                          205 CCGCCTGGGAACAGATGCCAAGTTCAATGCGATTCTGTGCTCCCGGAGCCGGGCCCA 1264
                                                                                                                                                                                                                                                                           696 TGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTTGTGAAATCTATTCG 755
                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCCATGATTAAGGGAGATACATC 935
                                                                                                                                                                                                                  636 TITGAGAAAGGIGITIGACAAGTACATGACTAIATCAGGATTTCAAATTGAGGAAACCAT 695
                                                                                                                                                                                                                                                                                                                                                                                        816 TGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGATCTGTTTAACATCAG
                                                                                                  516 TGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACT
                                                                                                                                                           576 TAAATGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACACGAAGTGTGTCTCA
                                          TTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAACAGAGACCCTGATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGGGATTACCGGAAGATTCTGCTGAAGATCTGTGGTGGCAATGAC 1610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         936 TGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Boston
STATE: Massachusetts
COUNTRY: U.S.A.
ZIP: 02110-2804
COMPUTER: READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 555X
COMPUTER: MOTOPERE: MOTOPERE: MOTOPERETING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: WOTOPERETECT (VERSION 5.0)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/526,136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/08/214,036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         et
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3, Application US/08526136
Patent No. 6107089
GENERAL INFORMATION:
APPLICANT TOWIC, Christine A. et
TITLE OF INVENTION: ANNEXIN XI
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 07/837,775
FILING DATE: February 13, 1992
APPLICATION NUMBER: 07/764,465
FILING DATE: September 23, 1991
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Fish & Richardson STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-526-136-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                          요
                                                                                                                                                           ô
                                                                                                                                                                                  g
                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  윱
             유
                                          õ
                                                                    g
                                                                                                ò
```

```
1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      576 TAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACACGAAGTGTGTCTCA 635
1211 CCGCCTGGGAACAGATGAGTCCAAGTTCAATGCGATTCTGTGCTCCCGGAGCCGGGCCGGGCCA 1270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1151 AAACGTGGACATGACCCTTGTCCAGAGATGTGCAGGAGCTCTATGCAGCTGGGGGAAA 1210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1391 GAATACCCCAGCCTTCTTTGCTGAAAGGCTCAACAAGGCCATGAGGGGAGCCGGAACCAA 1450
                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         515
                                                                                                                                                                                                                                                                                                                                                                                                        730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     850
                                                                                                                                                                                                                                                                                                                                                                                                                                                155
                                                                                                                                                                                                                                                                                                                                                                    95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGCATCCTGACTCTGTTGACATCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               851 GATCAAAGATCTGAAATCTGAACTGTCAGGAAACTTTGAGAAGACAATCTTGGCCCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     336 AAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAAGAACTGAGAGCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1271 CCTGGTGGCAGTTTTTAACGAGTATCAGAGGATGACAGGACGTGACATTGAGAAGAGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGATCTGTTTAACATCAG
                                                                                                                                                                                                                                                                                                                                                                    36 CAGAGGCACTGTGACTGCCTGGATTTGATGAGGGGGGCTGATGCAGAAACTCTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        731 GAAGGCCATGAAGGGCTTTGGGACTGACGAGCCAGCCATCATTGACTGCCTGGGTAGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 156 AAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     791 CTCCAACAAGCAACGACAGCAGATCCTCCTGTCGTCAAGACAGCATATGGGAAGGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTGAAGGGAGCTGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           396 CAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGACGTGGTGGGGGGACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           456 TTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAACAGAGACCCTGATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           636 TFTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAAATTGAGAAACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              696 TGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTTGTGAAATCTATTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            756 AAGTATACCTGCCTACCTGCGAGACCCTCTATTATGCTATGAAGGGAGCTGGGACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            516 TGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTTCAGGCTGGAAGCT
                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                 Length 2311:
                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                     DB 3;
                                                                                                                                                                                                                                                                                                                           Mismatches 397;
                                                                                                                                                                                                                                                                                                           . 4.8e-83
                                                                                                                                                                                                                                                                                     Score 310.8;
30,162
ER: 00786/099001
                                                                                                                                                                                                                                                                                                             Pred. No
                                                                                                                                                                                                                                                                                                                              ö
                     REFERENCE/DOCKET NUMBER: 00
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-8570
TELEPAX: (617) 542-8906
                                                                                                                                                                                                                                                                                     31.7%;
                                                                                                                           <u>ښ</u>
                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 58.0
Matches 549; Conservative
                                                                                                 TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                            TOPOLOGY: linear
US-08-526-136-3
    REGISTRATION NUMBER:
                                                                                                                                                                                    TYPE: nucleic acid
STRANDEDNESS: singl
                                                                                                                                                                 LENGTH: 2311
```

셤 ò 셤

```
1011 ATCATTGACTATAATCTGGCAGAACAAGATGTCCAGGCACTGCAGCGGGGGAGAAGGACCT 1070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1071 AGCAG------AGAGGAAACATGGGTCCCAGTCTTCACCCAGCGAAATCCTGAACAC 1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1122 CTCATCCGAGTGTTTGATCAGTACCAGCGAGCACTGGGCAAGAGCTGGAGGAGGCTGTC 1181
697 GACCGCGAGACTICIGGCAAITIAGAGCAACTACTCCTIGCIGITGTGAAAICIATICGA 756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                877 AAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATTAAGGGAGATACATCT 936
                                                                                                                                                     400 CAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGACGTGGTGGGGGGACACTTCA 459
                                                                                                                                                                                                                                                                                                                                                                                                                               577 AAATGGGGGACAGATGAAGAAAGTTATCACCATCTTTGGAACACGAAGTGTGTCTTAT
                                                                                                        831 gregaceregecearreaaarrerreceaereceaececeaecrecaegaegeere
                                                                                                                                                                                                    891 GCAGTCTACAAACACAATTTCCAGGTGGAGGCTGTGGATGACATCACATCTGAGACCAGT
                                                                                                                                                                                                                                                 460 GGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAACAGAGACCCTGATGCTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAA
                                                                                                                                                                                                                                                                                                                                         520 ---ATTGATGAAGCTCAAGITGAACAAGATGCTCAGGCTTTAFTTCAGGCTGGAGAACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        757 AGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAGGGAGCTGGGACAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1422 GGGGATTGCCAGTCAGCCTTCTGCAGGGCTGAAGAC 1466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  937 GGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION TITLE OF INVENTION: PRODUCTS FILE REFERENCE: CCD-257 (US)
CURRENY APPLICATION NUMBER: US/09/328,111
CURRENT FILING DATE: 1999-06-08
EARLIER FILING DATE: 1999-06-10
NUMBER OF SEQ ID NOS: 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 721, Application US/09328111
Patent No. 6262333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Endege, Wilson O.
APPLICANT: Steinmann, Kathleen E.
APPLICANT: Astle, Jon H.
APPLICANT: Burgess, Christopher C.
APPLICANT: Bushnell, Steven E.
APPLICANT: Carroll III, Eddle
APPLICANT: Catino, Theodore J.
APPLICANT: Port, Adnan
APPLICANT: Ford, Donna M.
APPLICANT: Lewis, Marcia E.
APPLICANT: Monahan, John E.
APPLICANT: Schlegel, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-328-111-721/c
                                                                                                                                                                                                                                                                                                                                                                                                                                 ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                  ŏ
                                                                                                          용
                                                                                                                                                   ŏ
                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                          g
                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    280 CCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAAT 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100 GCTATGAAAGGCTTGGGCACAGATGAGGAGCATCCTGACTCTGTTGACATCCCGAAGT 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        591 GCCATTACTGGCCAAGGCGTGGACCGCAGTGCCATTGTGGACGTGCTGACCAACCGGAGC 650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       160 AATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTG 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            111 AAGTCTCTACAGGCAGCACTTTCCGGCAACCTGGAGGATTGTGATGGCTCTGCTGCAG 770
                     876 GAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTTTTTCCATGATTAAGGGAGATACATC 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40 GGCACTGTGACTGACTTCCCTGGATTTGATGAGGGGGCTGATGCAGAAACTCTTCGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              331 GGCACCCTCAGGACCTTCTTGAACTTCAGCGTGGACAAGGATGCGCAGAGGCTACTGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 4; Length 1793;
                                                                                                                                  936 TGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Drmanac, Radoje T.
TITLE OF INVENTION: No. 6569662el Nucleic Acids and
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 784CIP2B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13.7%; Score 134.6; DB 4;
48.0%; Pred. No. 2.3e-30;
tive 0; Mismatches 479;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/620,312D
CURRENT FILING DATE: 2000-07-19
PRIOR APPLICATION NUMBER: 09/552,317
PRIOR FILING DATE: 2000-04-25
PRIOR APPLICATION NUMBER: 09/488,725
PRIOR FILING DATE: 2000-01-21
NUMBER OF SEQ ID NOS: 1105
SOFTWARE: pt_Ft_genes version 1.0
SEQ ID NO 747
LENGTH: 1793
                                                                                                                                                                                                                                                                Sequence 747, Application US/09620312D
Patent No. 6569662
                                                                                                                                                                                                                                                                                                        APPLICANT: Tang, Y. Tom
APPLICANT: Tang, Y. Tom
APPLICANT: Liu, Chenghua
APPLICANT: Liu, Chenghua
APPLICANT: Lang, Jie
APPLICANT: Zhang, Jie
APPLICANT: Ren, Fellyan
APPLICANT: Chen, Rui-hong
APPLICANT: Yang, Yonghong
APPLICANT: Yang, Yonghong
APPLICANT: Yang, Yonghong
APPLICANT: Wang, Jinn-Rui
APPLICANT: Wang, Jinn-Rui
APPLICANT: Wang, Jinn-Rui
APPLICANT: Wang, Zhuwi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 48.0 Matches 454; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; NAME/KEY: CDS
; LOCATION: (435)..(1472)
US-09-620-312D-747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
```

ð 셤 ð g ŏ 윱 ŏ g ò

```
ò
                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                       쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                           356 AAATTATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAG 415
                                                                                                                                                                                                                                                                         416 AATATGGCTCAAGCCTGGAAGATGACGTGGTGGGGGACACTTCAGGGTACTACCAGCGGA 475
                                                                                                                                                                                                                                                                                                                           535
                                                                                                                                                                                                                                                                                                                                                                                          536 TTGAACAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAG 595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 596 AAAAGTTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACA 655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             656 AGTACATGACTATATCAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCA 715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            211 CTTATICTAGGATGGCTAATCGAGACTTGTTAAGCAGTGTGAGCCGTGAGTTTTCCGGAT 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTTAGAGCAACTACTCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTG 775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGAGACCCTCTATTATGCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAG 835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGTTGGTGGTTCTCCTTCAGGCTAACAGAGCCCTGATGCTGGAATTGATGAAGCTCAAG
                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                               ö
                                                                                                                                                                                Length 644;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Steinmann, Kathleen E.
APPLICANT: Steinmann, Kathleen E.
APPLICANT: Steinmann, Kathleen E.
APPLICANT: Barle, Jon H.
APPLICANT: Burges, Christopher C.
APPLICANT: Bushnell, Steven E.
APPLICANT: Catroll III, Eddie
APPLICANT: Catino, Theodore J.
APPLICANT: Catino, Theodore J.
APPLICANT: Derti, Adnan
APPLICANT: Catino, Theodore J.
APPLICANT: Ford, Donna M.
APPLICANT: Monahan, John E.
APPLICANT: Schlegel, Robert
TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION
TITLE OF INVENTION: PRODUCTS
FILE REFERENCE: CCD-257 (US)
CURRENT APPLICATION NUMBER: US/09/328,111
                                                                                                                                                                               Score 123.6; DB 3; Length
Pred. No. 2.7e-27;
0; Mismatches 241; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCATGGTTTCCAGGAGTGAGATTGATCT 863
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 721
LENGTH: 644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTGTGGTCACTCGAAGTGAGATTGACCT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 625, Application US/09328111 Patent No. 6262333 GENERAL INFORMATION:
                                                                                                ; NAME/KEY: misc_feature
; LOCATION: (1)...(644)
; OTHER INFORMATION: n = A,T,C or G
US-09-328-111-721
                                                                                                                                                                             Query Match 12.6%;
Best Local Similarity 52.6%;
Matches 267; Conservative
                                                      TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-328-111-625/c
                                                                                                                                                                                                                                                                                                                                                                      476
                                                                                                                                                                               Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31
                                                                                     FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                  윱
                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                        100 GCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACTCTGTTGACATCCCGAAGT 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           160 AATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTG 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      259 ANTGCACAGAGACAGGATATTGCCTTCGCCTACCAGAGAAGGACCAAAAAGGAACTTGCA 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         199 TCAGCACTGAAGTCAGCCTTATCTGGCCACCTGGAGGAGGGTGATTTTGGGCCTATTGAAG 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAAT 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     340 GAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAA 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       139 ACACCTGCTCAGTATGACGCCTCTGAGCTAAAAGCTTCCATGAAGGGGCTGGGAACCGAC 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     40 GGCACTGTGACTTCCCTGGATTTGATGAGGGGGTGATGCAGAAACTCTTCGGAAG
                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                           Length 502;
                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                           Score 96.6; DB 3;
Pred. No. 2.9e-19;
0; Mismatches 174;
CURRENT FILING DATE: 1999-06-08
EARLIER APPLICATION NUMBER: US 60/088,801
EARLIER FILING DATE: 1998-06-10
NUMBER OF SEQ ID NOS: 850
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 625
LENGTH: 502
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             completed: August 28, 2003, 19:41:15
le : 57.3333 secs
                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 53.6%;
Matches 201; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      400 CAAGTTTATGAAGAA 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGAGTCTACAAGGAA 5
                                                                                                                                                                                              CRGANISM: Homo sapiens
US-09-328-111-625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Search cor
Job time
```

```
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   οŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  261, App
261, App
1, Appli
3, Appli
747, App
625, App
491, App
481, App
17, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1, Appli
5, Appli
2, Appli
2, Appli
4, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 3, Appli
                                                                                                               (without alignments)
7825.244 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                              August 28, 2003, 15:49:00 ; Search time 55.3333 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
Sequence
Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                           1 atggcaggtggctgtggcca.....tgctctccggagaagatgac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1: /cgn2_6/ptodata/2/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/2/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/2/ina/6A_COMB.seq:*
/cgn2_6/ptodata/2/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
GenCore version 5.1.6
(c) 1993 - 2003 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-125-746-2

US-08-125-746-4

US-09-143-579-261

US-09-542-615A-261

US-09-542-615A-261

US-08-526-136-3

US-08-526-136-3

US-09-526-136-3

US-09-132B-111-625

US-09-328-111-625

US-09-328-111-625

US-09-328-111-481

US-09-328-113-481
                                                                                                                                                                                                                                                                                                       Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-324-096A-1
                                                                                                                                                                                                                                                                           569978 seqs, 220691566 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-324-
US-09-324-
5225537-3
                                                             OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                           IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Issued_Patents_NA:*
                                                                                                                                                                                                                                                                                                                                           length: 0
length: 2000000000
                                                                                                                                                     US-09-970-969-3
981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                             seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                         90
                                                                                                                                                                                                                                                                             Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Database
                                                                                                                                                                                                                                                                                                                                           Minimum I
Maximum I
                                                                                              Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Result
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                            Sequence 33, Ap. Sequence 33, Ap. Sequence 101, A Sequence 101, A Sequence 101, A Sequence 101, A Sequence 101, Sequence 5401, Sequence 5401, Sequence 5401, Sequence 5401, Sequence 5401, Sequence 180, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 GATGAGGAGGATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTGGAAAATTTGAAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 GGATTTGATGAGCGGGCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACA
                                                                                                                                                                                                                                                                                                         Sequence 3, Application US/09324096A
Patent No. 6323313
GENERAL INFORMATION:
APPLICANT: Tait, Jonathan
APPLICANT: Tait, Jonathan
APPLICANT: Brown, David
TITLE OF INVENTION: ANNEXIN DERIVATIVE WITH ENDOGENOUS CHELATION SITES
FILE REPERENCE: UOFW-1-13841
CURRENT APPLICATION NUMBER: US/09/324,096A
CURRENT FILING DATE: 1999-06-01
NUMBER OF SEO ID NOS: 12
SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 981;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 981; DB 4; L
Pred. No. 1.4e-283;
O; Mismatches 0;
US-09-451-651-24
US-08-594-031-156
US-09-641-638-202
US-09-641-638-202
US-08-961-083-33
US-08-961-083-33
US-08-961-527-108
US-08-454-557C-101
US-08-454-557C-101
US-08-454-673C-101
US-08-440-426D-101
US-08-444-426D-101
US-08-444-426D-101
US-08-444-441-101
US-09-016-434-1270
US-09-016-434-1270
                                                                                                                                                                       US-09-252-991A-5401
US-09-252-991A-5409
US-09-252-991A-5404
US-09-641-638-186
                                                                                                                                                                                                                                                 ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 100.
Matches 981; Conservative
                         TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: CDS
LOCATION: (1)..(981)
US-09-324-096A-3
                                                                                                                                                                                                                                                                                              US-09-324-096A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                              981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH:
```

1 A	61		181 TCTGCAGCTTTTAAGACTCTGTTTGGCAGGATCTTCTGGATGACTGCAAATCAGAACTA 24 241 ACTGGAAAATTGAAAATTAATTGTGGCAGGATGAAACCTCTCGGCTTTATGATGCT 30	241	301 TATGACTGAACCTTGAAGGCTGGACAATGAAAAGTACTGACAGTGAAAATT 361 ATTGCTTCAAGGACCTGAAGAACTGAAGAGCACAAATATATGAAGAAGAAGAATAT	361	421	481 541	541	601 TTATCACCATCTTTGGAACACGAAGTGTCTCATTTGAGAAAGGTGTTTGAAAGGTGTTTGAGAAAGTAC	y 661 atgactatatcaggatttcaaattgaggaaaccattgaccggagacttctggcaattta 720 	721 GAGCAACTACTCCTTGCTGTAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAG 780	y 781 ACCTCTATTATGCTATGAGGGGGGGGGGGGGGGGGGGGG	y 841 GTTTCCAGGAGTGAGATTGATCTGTTTAACATCAGGAAGGA	901 ACCICITITATICCAIGATTAAGGGAGATACATCIGGGGACTATAAGAAAGCICTICIG 960	961 CTGCTCTCGGAAGATGAC 981 	SSULT 3 5-09-324-096A-5 Sequence 5, Application US/09324096A Patent No. 6323313 GENERAL INFORMATION: APPLICANT: Tait, Jonathan
g &	<u> 유</u>	6 8 6	ි සි ඊ	g &	do Qy	S B	d S	g &	8 è	5 A	٠, A	B G	å å	g cy	S G	Oy Dp	REGUEST
Oy 361 ATTCCTTCAAGGACACCTGAAGAACTGACAGCCATCAAACAAGTTTATGAAGAAGAATAT 420 	OY 421 GGCTCAAGCCTGGAAGATGACGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTG 480	481 GTGGTTCTCCTTCAGGCTAACAGAGCCCTGATGCTGGAATTGATGAGCTCAAGTTGAA 5 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	541 CANGATGTTCAGGCTTTATTCAGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAG 	OY 601 TTTATCACCATCTTTGGAACACGAAGTGTCTCATTTGAGAAGGTGTTTGACAAGTAC 660	OY 661 ATGACTATATCAGGATTTCAAATTGAGGAAACCATTGACCGGAGACTTCTGGGAATTTA 720 	0y 721 GAGCAACTACTTGTTGTGAAATCTATTGGAAGTATACCTGCCTACCTTGCAGAG 780 ,	OY 781 ACCCTCTATTATGCTATGAGGGGGCGCACATGATCATACCCTCATCAGAGTCATG 840	QY 841 GTTTCCAGGAGTGAGATTGATCTGTTTAACATCAGGAGAGTTTAGGAAGATTTTGCC 900 	Oy 901 ACCTCTTTATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTG 960 	961 CTGCTCCGGGAAGATGATGA	961	RESULT 196A-1 Sequence 1, Application US/09324096A Patent No. 6323313 Patent No. 6323313 Common tructual to the common tructual to the common tructual truct	GENERAL INCHMATION: ; APPLICANT: Tait, Jonathan ; APPLICANT: Brown, David ; TITLE OF INVENTION: ANNEXIN DERIVATIVE WITH ENDOGENOUS CHELATION SITES	FILE REFERENCE: UCFR. 1.1299/324,096A CURRENT FILING DATE: 1999-06-01 NUMBER OF SEQ ID NOS: 12	SOFTWAKE: Patentin Version 3.0 5 SEQ ID 01 7 TENGTH: 981 7 TYES: DNA	; Urdanism; Homo Sapiens ; FEATURE; ; LOCATION: (1)(981) US-09-324-096A-1	Query Match 99.7%; Score 977.8; DB 4; Length 981; Best Local Similarity 99.8%; Pred. No. 1.3e-282; Matches 979; Conservative 0; Mismatches 2; Indels 0; Gaps 0; Oy 1 ATGGCAGGTGGCCATATGGCACAGGTTCTCAGAGGCACTGTGACTGCCT 60

	RESULT 4 522537-3 ; Patent No. 522537 ; APPLICANT: FOSTER, DONALD ; TITLE OF INVENTION: METHODS FOR PRODUCING HYBRID ; PHOSPHOLIPID-BINDING PROTEINS ; CURRENT APPLICATION DATA: ; APPLICATION NUMBER: US/07/459,082 ; FILING DATE: 29-DEC-1989 ; SEQ ID NO:3: ; LENGTH: 1460 5225537-3	Ouery Match Ouery Match Ouest Local Similarity 99.8%; Pred. No. 3e-276; Bast Local Similarity 99.8%; Pred. No. 3e-276; Bast Local Similarity 99.8%; Pred. No. 3e-276; Matches 58; Conservative 0; Mismatches 2; Indels 0; Gaps 22 ArgGcAcAgGTTCTCAGAGGCATGTGACTTCCCTGGATTGATGAGGCGGCTGAT 81			Qy 442 GTGGTGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC 501 b 433 GTGGTGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC 492 Qy 502 AGAGACCTGATGCTGGAATTGATGAAGGTGAACAAGATGCTCAGGCTTAATT 561 Db 493 AGAGACCTGATGCTGGAATTGATGAAGATGAACAAGATGCTCAGGCTTATTT 561 CAGGATGGAGAATTGATGAAGATGAAGATGAACAAGATGAAGATGAACAAGATGAACAAGATGAACAAGATTAATTT 552 Qy 562 CAGGCTGGAGACTTAAATGGGGGACAGATGAAGATTAACACCATCTTGGAACA 621 Db 553 CAGGCTGGAAATTAATAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA 621 Db 553 CAGGCTGGAAACTTAAATGGGGGGACAGATGAAGAAAAAGTTTATCACCATCTTTGGAACA 612
APPLICANT: Brown, David TITLE OF INVENTION: ANNEXIN DERIVATIVE WITH ENDOGENOUS CHELATION SITES. FILE REFERENCE: U0FW-1-13841 CURRENT APPLICATION NUMBER: US/09/324,096A CURRENT FILING DATE: 1999-06-01 CURRENT FILING DATE: 1999-06-01 SOFTWARE: Patentin version 3.0 SOFTWARE: Patentin version 3.0 SEQ ID NO 5 LENGINE: TYPE: DNA ORGANISM: Homo sapiens FRATURE: NAME/KEY: CDS 1. LOCATION: (1). (981) US-09-324-096A-5	Query Match 99.5%; Score 976.2; DB 4; Length 981; Best Local Similarity 99.7%; Pred. No. 3.9e-282; 0; Gaps 0; Matches 978; Conservative 0; Mismatches 3; Indels 0; Gaps 0; Qy 1 ArGCCAGGTGGCTGGCCATATGGCACAGGTTCTCAGAGGCACTGACTG	121 GATGAGGACACCTGACTCTTGACATCCGAAGTAATCCTCAGGCCAGGAATC 181 TCTGCAGCTTTTAAGACTCTGTTGACAGGATCTTCTGGATGACTCTGAAATCAGAACTA 181 TCTGCAGCTTTTAAGACTCTGTTTGGCAGGATCTTCTGGATGACCTGAAATCAGAACTA 181 TCTGCAGAAATTTAAAAAATTAATTGTGGCTCTGTGAAACCTCTGGCTTATGGAACTA 241 ACTGGAAAATTTAAAAAATTAATTGTGGCTCTGATGAAACCTCTCGGCTTTATGATGTGT 111111111111111111111111111) w w w 4 4	OY 481 GTGGTTCTCTTCAGGCTAACAGAGCCTGGATGCTGGAATTGATGAAGCTCAAGTTGAA 540	Db 601 ITTATCACCATCTTTGGAAGTGTGTTTTTTTTTTTTTGGAAGTGTGTTTTTT

ö

141 255 201 261 375 321 435 381

```
CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                      AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                          562 CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GIGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                  ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                              82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                               GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          502 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                     Length 1567
                                                                                                                            Indels
                                                                                                   Score 956.8; DB 1;
Pred. No. 3.1e-276;
0; Mismatches 2;
          STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: DNA (genomic)
                                                                                                     97.54;
                                                                                                                            Conservative
                                                      CDS
136.,1095
nucleic acid
                                                                                                    Query Match
Best Local Similarity
Matches 958; Conserv
                                                     ; NAME/KEY:
; LOCATION:
US-08-125-746-2
                                                                                                                                                                                                                                                                                                             316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     622
                                                                                                                                                                                                                                         142
                                                                                                                                                                                                                                                                256
                                                                                                                                                                                                                                                                                      202
                                                                                                                                                                                                                                                                                                                                                                                    322
                                                                                                                                                                                                                                                                                                                                                                                                                               382
                                                                                                                                                                                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            862
                                            FEATURE
                                                                                                                                                   ò
                                                                                                                                                                      셤
                                                                                                                                                                                              ò
                                                                                                                                                                                                                 Б
                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                     q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g. 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                        672
                                                       741
                                                                             732
                                                                                                     801
                                                                                                                          792
                                                                                                                                                             921
                                                                                                                                                                                                                    912
          681
                                                                                                                                                 861
                                                                                                  GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                             CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                                                                                                                                                                                                                                                                                                                                               MAIER & NEUSTADT,
                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: P.C.
STREET: 1755 S. Jefferson Davis Highway, Suite 400
CITY: Arlington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC Competible
COMPUTER: IBM PC COMPETIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
FILING DATE: 24-SEP-1993
CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                        APPLICANT: SAINO, YUSHI
APPLICANT: IMASAKI, AKIO
APPLICANT: IMASAKI, AKIO
APPLICANT: SUDA, MAKOTO
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Oblon, No. 5591633man F.
REGISTRATION NUMBER: 24,618
REFERENCE/DOCKET NUMBER: 80-074-0 DIV
TELECOMUNICATION INFORMATION:
TELEPHONE: (703) 413-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/807,623
FILING DATE: 13-DEC-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: UP 037227/1987
FILING DATE: 20-FEB-1987
PRIOR APPLICATION NUMBER: JP 184428/1987
FILING DATE: 23-ULL-1987
APPLICATION UNMBER: JP 184428/1987
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                       Sequence 2, Application US/08125746 Patent No. 5591633 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (703) 413-2220
TELEEX: 424855 OPAT UR
INFORMATION FOR SEO ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1567 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: Arlington STATE: Virginia COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22202
                                                                                                                                                                                                                                                                                                            US-08-125-746-2
                                                                            673
                                                                                                                                                                                                                                                              913
                                                                                                    742
                                                                                                                          733
                                                                                                                                                803
                                                                                                                                                                      793
                                                                                                                                                                                             862
                                                                                                                                                                                                                 853
                                                                                                                                                                                                                                        922
                                                                                                                                                                                                                                                                                                 RESULT 5
                                                                       셤
                                                                                                                       셤
                                                                                                                                                                 셤
                                                                                                                                                                                           ð
                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                             셤
         ò
                          셤
                                                      8
                                                                                                   ò
                                                                                                                                          ò
```

441 555 501 615 561 675 621 735 681 795 741 855 801 915 861

324

264

360 444

384

504

540 624 600 684 99 744

564

```
AAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAGGGA 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITAACAICAGGAAGGAGITTAGGAAGAATITTGCCACCTCTCTTTATTCCATGATTAAG 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC 981
                                                                                                   GGCAGGGATCTTCTGGATGACCTGAAATCAGAACTAACTGGAAAATTTGAAAATTAAATT
                                   325 GGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAAGAA
                                                                                                                                                                                                                                                                                                                                          505 GACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                          565 GCTGGAGAACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTTGGAACACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          625 AGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGATCTG
                                                                                  GTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTGAAG
                                                                                                                                                                                                               CTGAGAGCCATCAAACAAGTTTATGAAGAATATGGCTCAAGCCTGGAAGATGACGTG
                                                                                                                                                                                                                                                                             GTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Henderson, Robert A.
APPLICANT: McNeill, Patricia D.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.455C11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 261, Application US/09643597
Patent No. 6426072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wang, Aijun
Skeiky, Yasir A.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bangur, Chaitanya
Hosken, Nancy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kalos, Michael D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wang, Tongtong
Fan, Liqun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fanger, Gary F
Li, Samuel X.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Wang, T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-643-597-261
                                                                                                                                                                                                                                                                           445
                  202
                                                                                265
                                                                                                                                                                                                               385
                                                                                                                                                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT
                                                                                                                                                                             qq
                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                đ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           q
                                                셤
                                                                                ò
                                                                                                           d
                                                                                                                                               ð
                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                1036 AAGGGAGATAACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTGTGTGGAGAAGATGAC 1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              84
AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTTGATGAGCGGGCTGATGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            85 GAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            145 TTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 957;
                                                                                                                                                                                                                                                            MAIER & NEUSTADT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                           E: P.C.
1755 S. Jefferson Davis Highway, Suite 400
                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97.2%; Score 953.8; DB 1;
99.8%; Pred. No. 1,9e-275;
11ve 0; Mismatches 2;
                                                                                                                                     GENERAL INFORMATION:
APPLICANT: SAINO, YUSHI
APPLICANT: STANO, YUSHI
APPLICANT: SUDA, MAKOTO
TITLE OF INVENTION: ANTICOAGULANT POLYPEPTIDE
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/807,623
FILING DATE: 13-DEC-1991
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 037227/1987
FILING DATE: 20-FEB-1987
FILING DATE: 23-JUL-1987
ATORNEY/AGENT INFORMATION:
NAME: Oblon, No. 5591633man F.
REGISTRATION NUMBER: 24,618
REGISTRATION NUMBER: 24,618
REGISTRATION NUMBER: 80-074-0 DIV
TELEPHONE: (703) 413-3000
TELEX: 248855 OPAT UR
INFORMATION FOR SEQ ID NO: 4:
SEGUENCE CHARACTERISTICS:
SEGUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80-074-0 DIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/08/125,746
FILING DATE: 24-SEP-1993
                                                                                                             Sequence 4, Application US/08125746
Patent No. 5591633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY: unknown
MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 957 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              al Similarity 99.8
955; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 unknown
                                                                                                                                                                                                                                                                      ADDRESSEE: P.C. STREET: 1755 S. CITY: Arlington STATE: Virginia COUNTRY: U.S.A. ZIP: 22202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-125-746-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ouery Match
Best Local S
Matches 955
 922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
 ਨੇ
                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
```

804

81

261

```
89 ATGGCACAGGTTCTCAGAGGCACTGNGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                262 ATTGTGGCTCTGAAACCCTCTCGGCTTTATGATGCTTATGAACAGAACATGCCTTG 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 89 ATGGCACAGGTTCTCAGAGGCACTGNGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                               209 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                 142 CTGTTGACATCCCGAAGTAATGCTCAGCGCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                           ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                    142 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      209 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 401;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Wang, Tongtong
APPLICANT: Kalos, Michael D.
APPLICANT: Ralos, Michael D.
APPLICANT: Bangur, Chaltenya S.
APPLICANT: Bangur, Chaltenya S.
APPLICANT: Hosken, Nancy A.
APPLICANT: Fanger, Gary R.
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILE REPERBENCE: 210121, 455C8
CURRENT APPLICATION NUMBER: US/09/542,615A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 31.7%; Score 311; DB 4; L
Best Local Similarity 99.4%; Pred. No. 2.1e-83;
Matches 311; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 350
SOFWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 261
LENCTH: 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 261, Application US/09542615A Patent No. 6518256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: misc_feature

LCCATION: (1)...(401)

CTHER INFORMATION: n = A,T,C or G

US-09-542-615A-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             111111111111
389 AAGGGAGCTGGAA 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            322 AAGGGAGCTGGAA 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Homo sapten
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                     ç
                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           209 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG 268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAATCTCTGCAGCTTTTAAGACTCTG 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          262 ATTGTGGCCTCTGAAGAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                  31.7%; Score 311; DB 4; Length 401; llarity 99.4%; Pred. No. 2.1e-83; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 31.7%; Score 311; DB 4; Length 401; Best Local Similarity 99.4%; Pred, No. 2.1e-83; Matches 311; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 261, Application US/09480884A

Fractant No. 6483597

GENERAL INFORMATION

APPLICANT: Wang, Tongtong

APPLICANT: Hosken, Nancy A.

APPLICANT: Hosken, Nancy A.

APPLICANT: Panger, Gary R.

APPLICANT: Panger, Gary R.

APPLICANT: Panger, Gary R.

TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY

TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY

TITLE OF INVENTION: CANDOUNDS AND 
CURRENT APPLICATION NUMBER: US/09/643,597
CURRENT FILING DATE: 2000-08-21
NUMBER OF SEQ ID NOS: 369
SOFTWARE: FastSEQ for Windows Version 3.0
LENGTH: 401
                                                                                                                                                                                                                                                         ; NAME/KEY: misc_feature
; LCCATION: (1)...(401)
; CTHER INFORMATION: n = A,T,C or G
US-09-643-597-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              , LOCATION: (1)...(401)
; OTHER INFORMATION: n = A,T,C or US-09-480-884A-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGGGAGCTGGAA 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      322 AAGGGAGCTGGAA 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc_feature
LOCATION: (1)...(401)
                                                                                                                                                                    TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 311; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-480-884A-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             142
                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
```

ð

ð 8 ò a ð ö

```
Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                       208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGAGATGAGGAGGAGCATCCTGACT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTGFGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22 ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          209 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                               APPLICANT: Rails, Michael D.
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Hosken, Nancy
APPLICANT: Hosken, Nancy
APPLICANT: Hosken, Nancy
APPLICANT: Li, Samuel X.
APPLICANT: Kannel X.
TAPLICANT: Skeiky, Yasir A.W.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.455C9
CURRENT APPLICATION NUMBER: US/09/606,421B
CURRENT FILING DATE: 2000-06-28
NUMBER OF SEQ ID NOS: 358
SOPTWARE: FastSEQ for Mindows Version 3.0
SEQ ID NO 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 401;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31.7%; Score 311; DB 4;
99.4%; Pred. No. 2.1e-83;
tive 0; Mismatches 2;
                                                                                                                                                                        Sequence 261, Application US/09606421B Patent No. 6531315
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; NAME/KEY: misc_feature
; DCCATION: (1)...(401)
; OTHER INFORMATION: n = A,T,C or G
US-09-606-421B-261
                                                                                   111111111111
389 AAGGGAGCTGGAA 401
                                                                     AAGGGAGCTGGAA 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          322 AAGGGAGCTGGAA 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGGGAGCTGGAA 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 99.4
Matches 311; Conservative
                                                                                                                                                                                                                     APPLICANT: Wang, Tongtong
APPLICANT: Fan, Liqun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA ORGANISM: Homo sapien
                                                                                                                                                          US-09-606-421B-261
                                                                   322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      142
         262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
         ç
                                     셤
                                                                   ö
                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
```

RESULT 11 US-08-526-136-1 ; Sequence 1, Application US/08526136

```
215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  965 TGATGAAGCCTGCTGATCGAGATCCTGGCCTCCCGCAGCAAGGAGCACATCCGGGAGCT 1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              96 GAAGGCTATGAAAGGCTTGGGCACACAGATGAGGAGCATCCTGACTCTGTTGACATCCCG 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           396 CAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGACGTGGTGGGGGACAC 455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      156 AAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                276 GAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTGAAGGGAGCTGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            336 AAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAAGAACTGAGAGCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         36 CAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGATGCAGAAACTCTTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 2305;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 3;
                                                                                                                                                                            COUNTRY: U.S.A.
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55SX
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: WordPerfect (Version 5.0)
CURRET APPLICATION DATA:
APPLICATION NUMBER: US/08/526,136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 310.8; DB 3;
Pred. No. 5.6e-83;
0; Mismatches 397;
                        et al
                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
APPLICATION NUMBER: 07/837,775
FILING DATE: February 13, 1992
APPLICATION NUMBER: 07/764,465
FILING DATE: September 23, 1991
ATORNEY/AGEN INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/214,036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: CLATK, PAUL T.
REGISTRATION NUMBER: 30,162
REFERENCE/POCKET NUMBER: 0078
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
GENERAL INFORMATION:
APPLICANT: TOALE, Christine A.
TITLE OF INVENTION: ANNEXIN XI
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
                                                                                                  ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31.7%;
58.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 58.0
Matches 549; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                              Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear
                                                                                                                                       CITY: Boston
STATE: Massac
                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-526-136-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
```

ö

```
Query Match
                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
     205 CCGCCTGGGAACAGATGCTCCAAGTTCAATGCGATTCTGTGTTCTCCGGAGCCGGGCCCA 1264
                                                                                                                                                                                                                                                                                       515
                                                                                                                                                                                                           695
                                                                                                                                                                                                                                                              696 TGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTTGTGAAATCTATTCG 755
                                                                                                                                                                                                                                                                                                                                                                                                                           GAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCCATGATTAAGGGAGATACATC 935
                                                                                                                                                                                                                        516 TGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACT
                                                                                                                           1145 AAACGTGGACATGACCCTTGTCCAGAGATGTGCAGGAGCTCTATGCAGCTGGGGAGAA
                                                                                                                                                                                                           636 TTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAAATTGAGGAAACCAT
                                                                                                                                                                                                                                                                                                                                                                      816 TGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGATCTGTTTAACATCAG
                                              TTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAACAGAGACCCTGATGC
                                                                                                                                                      576 TAAATGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACACGAAGTGTGTCTCA
                                                                                                                                                                                                                                                                                                                  756 AAGTATACCTGCCTACCTTGCAGAGCCCTCTATTATGCTATGAAGGGAGCTGGGACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                936 TGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC 981
-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: U.S.A.
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 555X
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: MOXGMERGET (Version 5.0)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
APPLICATION NUMBER: 07/837,775
FILING DATE: FEBRUARY 13, 1992
APPLICATION NUMBER: 07/764,465
FILING DATE: September 23, 1991
ATORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/08/214,036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/08/526,136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 3, Application US/08526136
Patent No. 6107089
GENERAL INFORMATION:
TITLE OF INVENTION: ANNEXIN XI
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    et
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: Boston
STATE: Massac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-526-136-3
                                            456
                                                                                                                                                                                                                                                                                                                                                                                                                             876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 12
                                                                                                                          g
                                                                                                                                                                              a
                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                   용
                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                 유
                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                     임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                            ö
                                                                       g
                                                                                                ŝ
                                                                                                                                                      õ
                                                                                                                                                                                                                                                               å
                                                                                                                                                                                                                                                                                                                                                                      à
```

```
1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1151 AAACGTGGACATGACCCTTGTCCAGAGATGTGCAGGAGCTCTATGCAGCTGGGGAGA 1210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1031 GAACAGAGTCTACAAGACAGAATTCAAAAAGACCCTGGAGGAGGCCATTCGGAGCGACAC 1090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  455
                                                                                                                                                                                                                                                                                                                                                                                        730
                                                                                                                                                                                                                                                                                                                                                                                                                              155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         336 AAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAAGAACTGAGAGCCAT 395
                                                                                                                                                                                                                                                                                                                                                       95
                                                                                                                                                                                                                                                                                                                                                                                                                              396 CAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGACGTGGGGGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1211 CCGCCTGGGAACAGATGAGAGTTCAATGCGATTCTGTGCTCCCGGAGCCGGGCCCA
                                                                                                                                                                                                                                                                                                                                                     36 CAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGATGCAGAAACTCTTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               276 GAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTGAAGGGAGCTGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          696 TGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTTGTGAAATCTATTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 816 TGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGATCTGTTTAACATCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          156 AAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   576 TAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTTGGAACACGAAGTGTCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               636 TTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAAATTGAGGAAACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    756 AAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAGGGAGCTGGGACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              456 TTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAACAGAGACCCTGATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         516 TGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACT
                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                           Length 2311;
                                                                                                                                                                                                                                                                           DB 3;
                                                                                                                                                                                                                                                                                           Pred. No. 5.6e-83;
0; Mismatches 397;
                                                                                                                                                                                                                                                                           31.7%; Score 310.8; 58.0%; Pred. No. 5.6e
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00786/099001
TELECOMMUTCATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
                                                                                            INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 2311
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                             Best Local Similarity 58.0
Matches 549; Conservative
                                                                                                                                                                                                                   ; TOPOLOGY: linear
US-08-526-136-3
```

g

576

```
1071 AGCAG------AGAGGAAACATGGGTCCCAGTCTTCACCCAGCGAAATCCTGAACAC 1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1122 CTCATCCGAGTGTTTGATCAGTACCAGCGAGCACTGGGCAAGAGCTGGAGGAGGCTGTC 1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1182 CAGAACCGTTTCCATGGAGATGCTCAGGTGGCTCTGCTCGGCTAGCTTCGGTGATCAAG 1241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1302 TACCAAGTCCTGATTCGCATCCTTATCTCTCGATGTGAGACTGACCTTCTGAGTATCAGA 1361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 697 GACCGCGAGACTTCTGGCCAATTTAGAGCAACTACTCCTTGCTGTTGTGAAATCTATTCGA 756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     817 GATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGATCTGTTTAACATCAGG 876
                                                                                      400 CAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGACGTGGTGGGGGACACTTCA 459
                                                                                                                                                                                                                                                                                                                                              577 AAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACACGAAGTGTGTCTCAT 636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           877 AAGGAGTITTAGGAAGAATITITGCCACCICTITATICCAIGATTAAGGGAGATACAICT 936
                                                  340 GAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAA
                                                                                                                                                             891 GCAGTCTACAAACACAATTTCCAGGTGGAGGCTGTGGATGACATCACATCTGAGACCAGT
                                                                                                                                                                                                 460 GGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAACAGAGCCCTGATGCTGGA
                                                                                                                                                                                                                                                                        ---ATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACTT
                                                                                                                                                                                                                                                                                                                                                                                                                     637 TTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAAATTGAGGAAACCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGTATACCTGCCTACCTTGCAGAGCCCTCTATTATGCTATGAAGGGAGCTGGGACAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       937 GGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION TITLE OF INVENTION: PRODUCTS FILE REFERENCE: CCD-257 (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/328,111
CURRENT FILING DATE: 1999-06-08
EARLIER APPLICATION NUMBER: US 60/088,801
EARLIER FILING DATE: 1998-06-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEC ID NOS: 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         us-09-328-111-721/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                757
                                                                                                                                                                                                                                                                      520
                                                                                                                                                         q
                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ^{\circ}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                  ò
                                                                                      g
                                                                                                                    οy
                                                                                                                                                                                               ò
                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                1511 AGCAGAGTATAAGCGGCTGTATGGCAAGTCGCTGTACCACGACATCACGGGAGACACTTC 1570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           160 AATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTG 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     531 GGCACCCTCAGGACCTTCTTGAACTTCAGCGTGGACAAGGATGCGCAGAGGCTACTGAGG 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100 GCTATGAAAGGCTTGGGCACAGATGAGGAGGATCCTGACTCTGTTGACATCCCGAAGT 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     280 CCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAAT 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCCATGATTAAGGGAGATACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 40 GGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGATGCAGAAACTCTTCGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 1793;
                                                                                                       TGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                               APPLICANT: Thus chery the APPLICANT: The AS and 1 is a APPLICANT: Then, Telyan APPLICANT: Chen, Relyan APPLICANT: Chen, Relyan APPLICANT: Chen, Relyan APPLICANT: Web, Aldong J. APPLICANT: Web, Aldong J. APPLICANT: Web, Aldong J. APPLICANT: Wang, Jian-Rui APPLICANT: Wang, Jian-Rui APPLICANT: Mang, Duntui APPLICANT: John Tillinghast APPLICANT: Donnanc, Radoje Tille OF INVENTION: No. 6569662el Nucleic Acids and Title OF INVENTION: Polypeptides FILE REFERENCE: 740TP2B
CURRENT FILING DATE: 2000-07-19
PRIOR FILING DATE: 2000-07-19
PRIOR FILING DATE: 2000-04-25
PRIOR RELING DATE: 2000-01-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 134.6; DB 4;
Pred. No. 2.4e-30;
0; Mismatches 479;
                                                                                                                                                                                                          Sequence 747, Application US/09620312D
Patent No. 6569662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 1105
SOFTWARE: Pt_FL_genes Version 1.0
SEQ ID NO 747
LENGTH: 1793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13.7%;
                                                                                                                                                                                                                                                               APPLICANT: Tang, Y. Tom
APPLICANT: Liu, Chenghua
APPLICANT: Asundi, Vinod
APPLICANT: Asundi, Vinod
APPLICANT: Ren, Felyan
APPLICANT: Chen, Rui-hong
APPLICANT: Tang, Oing A.
APPLICANT: Wehrman, Tom
APPLICANT: Wen, Aldong J.
APPLICANT: Yang, Yonghong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 48.0
Matches 454; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; NAME/KEY: CDS
; LOCATION: (435)..(1472)
US-09-620-312D-747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo saplens
                                                                                                                                                                                                                                                   GENERAL INFORMATION:
             876
                                                                                  936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE
             ð
                                              요
                                                                                  ò
                                                                                                                  윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   đ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

```
õ
                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                  ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AATATGGCTCAAGCCTGGAAGATGACGTGGTGGGGGGACACTTCAGGGTACTACCAGCGGA 475
                                                                                                                                                                                                                                                                                                                                                                        451 AATTIGGACGAGACCTIGAAAAGGNCATTAGGICAGATACATCAGGACATTITGAACGIT 392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        596 AAAAGTTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACA 655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            716 ATTTAGAGCAACTACTCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTG 775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGAGACCCTCTATTATGCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAG 835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             656 AGTACATGACTATATCAGGATTTCAAATTGAGGAAACCATTGACGGGGAGACTTCTGGCA 715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       91 CTGAGAGGCTCTACTATGCTATGAAAGGTGCTGGCACAGATGACTCCACCCTGGTCCGGA 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         211 CITATICIAGGAIGGCIAAICGAGACITGIIAAGCAGIGIGAGCCGIGAGTITICCGGAI
                                                                                                                                                                                                                                                                                                                                                                                                                                     151 ATGTAGAAAGTGGTTTGAAGACCATCTTGCAGTGTGCCCTGAACCGCCCTGCCTTTTG
                                                                                                                                                                                                                                                                     356 AAATTATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAG
                                                                                                                                                                                                                                                                                                       476 TGTTGGTGGTTCTCCCTTCAGGCTAACAGAGCCCTGATGCTGGAATTGATGAAGCTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   536 TTGAACAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAG
                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                  DB 3; Length 644;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Endege, Wilson O.
APPLICANT: Endege, Wilson O.
APPLICANT: Steinmann, Kathleen E.
APPLICANT: Astle, John H.
APPLICANT: Bushnell, Steven E.
APPLICANT: Carroll III, Eddie
APPLICANT: Catino, Theodore J.
APPLICANT: Catino, Theodore J.
APPLICANT: Levis, Marcia E.
APPLICANT: Ford, Donna M.
APPLICANT: Monahan, John E.
APPLICANT: Schlegel, Robert
TITLE OF INVENTION: NOVEL HUMAN GENES AND GENE EXPRESSION
TITLE OF INVENTION: PRODUCTS
FILE REFERENCE: CCD-257 (US)
CURRENT APPLICATION NUMBER: US/09/328,111
                                                                                                                                                                                               Score 123.6; DB 3; Length
Pred. No. 2.9e-27;
0; Mismatches 241; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCATGGTTTCCAGGAGTGAGATTGATCT 863
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 721
LENGTH: 644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 625, Application US/09328111
Patent No. 6262333
                                                                                                       NAME/KEY: misc_feature
// LCCATION: (1)...(644)
// CTHER INFORMATION: n - A.T.C OF
US-09-328-111-721
                                                                                                                                                                                               Ouery Match
Best Local Similarity 52.6%;
Matches 267; Conservative
                                                     TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No. 6262333
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-328-111-625/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           836
                                                                                          FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     윱
                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                          ö
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       199 TCAGCACTGAAGTCAGCCTTATCTGGCCACCTGGAGACGGTGATTTTGGGCCTATTGAAG 140
                                                                                                                                                                                                                                                                                                                                                      320
                                                                                                                                                                                                                                                                                                                                                                                               159
                                                                                                                                                                                                                                                                                                                                                                                                                                    260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    259 AATGCACAGAGACAGGATATTGCCTTCGCCTACCAGAAGGACCAAAAAGGAACTTGCA 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                340 GAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAA 399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80
                                                                                                                                                                                                                                                                                                             66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          139 ACACCTGCTCAGTATGACGCTCTGAGCTAAAAGCTTCCATGAAGGGGCTGGGAACCGAC
                                                                                                                                                                                                                                                                                                             40 GGCACTGTGACTGACTTCCCTGGATTTGATGAGGGGGCTGATGCAGAAACTCTTCGGAAG
                                                                                                                                                                                                                                                                                                                                       100 GCTATGAAAGGCTTGGGCACAGATGAGGAGGATCCTGACTCTGTTGACATCCCGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                       160 AATGCTCAGCGCCAGGAATCTCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                280 CCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Caps
                                                                                                                                                                                                                                                                    ô
                                                                                                                                                                                                                             Length 502;
                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                             Ouery Match 9.8%; Score 96.6; DB 3; Best Local Similarity 53.6%; Pred. No. 3e-19; Matches 201; Conservative 0; Mismatches 174;
                 EARLIER APPLICATION NUMBER: US 60/088,801
EARLIER FILING DATE: 1998-06-10
NUMBER OF SEQ ID NOS: 850
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 625
LENGTH: 502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             completed: August 28, 2003, 19:41:17 ne : 57,3333 secs
CURRENT FILING DATE: 1999-06-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                400 CAAGTTTATGAAGAA 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGAGTCTACAAGGAA 5
                                                                                                                                                                ; ORGANISM: Homo sapiens
US-09-328-111-625
                                                                                                                         LENGTH: 50
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Search cor
Job time
```

```
(without alignments)
12241.057 Million cell updates/sec
                                                                                                                                                                                                              US-09-970-969-5
981
1 atgycatgtggctgcggtca.....tgctctccggagagatgac 981
                                                                                                                            August 28, 2003, 15:43:40 ; Search time 216.333 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                 5105512
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                    2552756 segs, 1349719017 residues
                                                                                 OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                    IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                                                                                                                                                                      Searched:
                                                                                                                            Run on:
```

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

N_Geneseq_19Jun03:* Database :

/SIDS1/gcgdata/genesed/geneseqn-embl/NA2000.DAT:*/SIDS1/gcgdata/geneseq/geneseqn-embl/NA2001A.DAT:* /SIDS1/gcgdata/geneseq/geneseqn-embl/NA2001B.DAT: /SIDS1/gcgdata/geneseq/geneseqn-embl/NA2002.DAT:* /SIDS1/gcgdata/geneseq/geneseqn-embl/NA2003.DAT:* /SIDS1/gcgdata/geneseq/geneseqn-emb1/NA1989.DAT:*/SIDS1/gcgdata/geneseq/geneseqn-emb1/NA1990.DAT:* /SIDS1/gcgdata/geneseq/geneseqn-emb1/NA1997.DAT:* /SIDS1/gcgdata/geneseq/geneseqn-emb1/NA1998.DAT:* /SIDS1/gcgdata/geneseq/genesegn-emb1/NA1999.DAT:* /SIDSI/gcgdata/geneseq/geneseqn-embl/NA1980.DAT:*/SIDSI/gcgdata/geneseq/geneseqn-embl/NA1981.DAT:*/SIDSI/gcgdata/geneseqn-embl/NA1981.DAT:*/SIDSI/gcgdata/geneseqn-embl/NA1982.DAT:*/SIDSI/gcgdata/geneseqn-embl/NA1982.DAT:*/SIDSI/gcgdata/geneseqn-embl/NA1983.DAT:*/SIDSI/gcgdata/geneseqn-embl/NA1983.DAT:*/SIDSI/gcgdata/geneseqn-embl/NA1986.DAT:*/SIDSI/gcgdata/geneseqn-embl/NA1986.DAT:*/SIDSI/gcgdata/geneseqn-embl/NA1986.DAT:*/SIDSI/gcgdata/geneseqn-embl/NA1986.DAT:*/SIDSI/gcgdata/geneseqn-embl/NA1986.DAT:*/SIDSI/gcgdata/geneseqn-embl/NA1986.DAT:*/SIDSI/gcgdata/geneseqn-embl/NA1986.DAT:*/SIDSI/gcgdata/geneseqn-embl/NA1986.DAT:*/SIDSI/gcgdata/geneseqn-embl/NA1987.DAT:*/SIDSI/gcgdata/genese /SIDS1/gcgdata/geneseg/genesegn-embl/NN1994_DAT: /SIDS1/gcgdata/geneseg/genesegn-embl/NN1995_DAT: /SIDS1/gcgdata/geneseg/genesegn-embl/NN1995_DAT: /SIDS1/gcgdata/geneseq/genesegn-emb1/NA1992.DAT: /SIDS1/gcgdata/geneseq/geneseqn-emb1/NA1993 /SIDS1/gcgdata/geneseq/geneseqn-embl/NA1991

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Plasmid contg, pla Human cDNA #162 di Endonexin II compl Anticoagulant PP4 Modified human ann Modified human ann Modified human ann Vascular anti-coag Description SUMMARIES 2 AAC91370 2 AAC91368 2 AAC91369 3 AAN91353 AAN81113 ABX63162 5 AAN91821 0 AAN90112 a Query Match Length DB 100.0 99.5 99.5 97.6 97.5 97.5 Score 976.2 976.2 957.8 956.8 956.8 Result ģ

	PAP-I cDNA from hu	PAP-I. Homo sapie	Sequence encoding	Sequence encoding	Human lipocortin-V	Lung cancer assoct	Toxicologically re	Mouse ischaemic co	Rat sequence diffe	Human annexin V pr	Modified annexin p	^{51}y	PAP-I-protein C fu	PAP-I-protein C fu	Bovine EST associa		Coding strand of c		cDNA encoding huma	Human cancer assoc	Human cervical can	Human ovarian tumo	Human cDNA #220 di	Human placenta-der	DNA encoding novel	Human cDNA differe	Gene #3844 used to	cDNA of human plac	Human NOVX polynuc	Human colon cancer	Phase-1 Rat CT gen	Human lung cancer-	Human lung cancer	ung tumon	XI gene	Annexin XI gene in
1 AAA11241	AAN82107	2 AAQ12679	AAN80801	۷.			5 ABZ83344			5 AB221925		5 ABX05088			ABX4793						•	-				-	-	•	-	ABO5		AAC6	ABQ9236	ABL4917	ᅼ	4 AAQ39150
1803 21	1454 9	•	1466 9	6 896	574	1637 21	024			960 25	7	~	Н	1529 13	7	7	٦	7			2181 22		300		•	2468 24	2468 24	•	•		686 24			401	305 1	2311 1
97.4	97.4	97.4	97.3	97.2	_	~	_	_	_	~	_	50.5	42.0	42.0	37.2	36.3	35.8	_								ın	ın	m	.		_	_	7	7	_	-
55.	55.	55.	954.6	S	S	943.8	883	749.4	727	518.4	17	495.8	412.2	412.2	m	356.2	351	0	4	49.	49.	349.4	٠.	ä	48.	348.2	θ,	Ġ	46	319.8	315.2	311	311	m	310.8	307.6
đ	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	28	29	30	31	32	33	c 34	35	36	37	38	c 39		41	42	43	44	45

ALIGNMENTS

Human; annexin; chelation site; nuclear imaging; apoptosis; transplant rejection; ds. Modified human annexin nucleotide sequence, SEQ ID NO: 5. AAC91370 standard; DNA; 981 BP 25-MAY-2000; 2000WO-US14324 01-JUN-1999; 99US-0324096 16-MAR-2001 (first entry) (UNIW) UNIV WASHINGTON WPI; 2001-080465/09. P-PSDB; AAB50865. rait JF, Brown DS; WO200073332-A1. Homo sapiens 07-DEC-2000. AAC91370; RESULT 1 AAC91370

Novel modified annexin useful for imaging vascular thrombi and

us-09-970-969-5.rng

```
ö
                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                          9
                                                    The present sequence encodes a modified annexin having an N-terminal chelation site, which comprises an amino acid extension including a glycine and a cysteine residue. The modified annexin is useful for imaging vascular thrombi or apoptosis which is associated with response to a chemotherapeutic agent or with rejection as a result of transplantation. The modified annexin can effectively chelate a radionuclide and retain annexin bloactivity. It can be readily prepared in high radiochemical purity, in contrast to conventional conjugation chemistries that provide a distribution of conjugation products, the modified annexin has a single chelation site remote from the site of biological activity.
                                                                                                                                                                                                                                                                      1 ATGCCATGTGGCTGCGGTCATATGGCACAGGTTCTCAGAGGCACTGTGACTTGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGCAACTACTGCTGTGTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAG
                                                                                                                                                                                                                                                                               TCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATGAGGAGAGCATCCTGATCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTCAAGCCTGGAAGATGACGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGGTTCTCCTTCAGGCTAACAGAGCCCTGATGCTGGAATTGATGAAGCTCAAGTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGACTATATCAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAG
                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                ö
 apoptosis, has N-terminal chelation site comprising amino acid
extension which comprises a glycine and a cysteine residue
                                                                                                                                                                                                                       100.0%; Score 981; DB 22; Length 981; 100.0%; Pred. No. 1.3e-274; ve. 0; Mismatches 0; Indels 0
                                                                                                                                                                                                 Sequence 981 BP; 286 A; 187 C; 250 G; 258 T; 0 other;
                                    English
                                  Page 35-37; 39pp;
                                                                                                                                                                                                                                   11 Similarity 100.
981; Conservative
                                 Claim 27;
                                                                                                                                                                                                                        Query Match
Best Local S:
Matches 981,
                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            721
õ
                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                  ά
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           $ B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            õ
```

```
ö
                                                                                         900
                                                                                                                                                  960
                                                                                                                   900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present sequence encodes a modified annexin having an N-terminal chelation site, which comprises an amino acid extension including a glycine and a cysteine residue. The modified annexin is useful for imaging vascular thrombi or apoptosis which is associated with response to a chemotherapeutic agent or with rejection as a result of transplantation. The modified annexin can effectively chelate a radionuclide and retain annexin bloactivity. It can be readily prepared in high radiochemical yield and with high radiochemical purity. In contrast to conventional conjugation chemistries that provide a distribution of conjugation products, the modified annexin has a single
GAGCAACTACTCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAG
                              ACCTCTCTTTATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel modified annexin useful for imaging vascular thrombl and apoptosis, has N-terminal chelation site comprising amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                981;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               extension which comprises a glycine and a cysteine residue
                                                                                                                                                                                                                                                                                                                                                                                                                                    chelation site; nuclear imaging; apoptosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         chelation site remote from the site of biological activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 99.5%; Score 976.2; DB 22; Length Best Local Similarity 99.7%; Pred. No. 3.3e-273; Matches 978; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                         Modified human annexin nucleotide sequence, SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 981 BP; 286 A; 187 C; 251 G; 257 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 25; Page 28-30; 39pp; English.
                                                                                                                                                                                                                             CIGCICICCGGAGAAGAIGAC 981
                                                                                                                                                                                                             CTGCTCTCCGGAGAAGATGAC 981
                                                                                                                                                                                                                                                                                                                    ВР
                                                                                                                                                                                                                                                                                                                 AAC91368 standard; DNA; 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99US-0324096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-MAY-2000; 2000WO-US14324
                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                    transplant rejection; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             UNIW ) UNIV WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-080465/09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tait JF, Brown DS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    P-PSDB; AAB50863
                                                                                                                                                                                                                                                                                                                                                                                                                                      annexin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          40200073332-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo saptens
                                                                                                                                                                                                                                                                                                                                                                           16-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-DEC-2000
   721
                                                                                                                                                   901
                                                                                                                                                                                                             961
                                                                                                                                                                                                                                        196
                                                                                                                                                                                                                                                                                                                                              AAC91368;
                                                                                                                                                                                                                                                                                                                                                                                                                                      Human;
                                                                                                                                                                                                                                                                                       RESULT 2
                                                                                                                                                                                                                                                                                                      AAC91368
                              ò
                                                          q
                                                                                         ŏ
                                                                                                                   q
                                                                                                                                                  δ
                                                                                                                                                                              g
                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                    a
```

Modified human annexin nucleotide sequence, SEQ ID NO: 2.

(first entry)

16-MAR-2001

AAC91369;

			-										·		
	120 180 180	240	300	360	420	480	540	009	099	720	780	840	006	096	
	GGATTTGATGAGGGGGCTGATGCAGAAACTCTTGGGAAGGCTATGAAAGGCTTGGGCAC. GATGAGGAGCATCCTGATGACATCCCGAAGTAATGCTCAGGGCAGGAAAT [TCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTA 	ACTGGAAAATTTGAAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCT 	Tatgaactgaaacatgccttgaaggcagctggaacaaatgaaaagtactgacagaaatt 	ATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGATAT 	GGCTCAAGCCTGGAAGATGACGTGGTGGGGACACTTCAGGGTACTACCAGGGGATGTTG 	GTGGTTCTCCTTCAGGCTAACAGAGACCCTGATGCTGGAATTGATGAAGGCTCAAGTTGAA	L CAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAG 	TTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTAC 	ATGACTATATCAGGATTCCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCCATTTA	GAGCAACTACTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGGG	1 ACCCICTATTATGCTATGAAGGAGCTGGGACAGATGATCATACCCTCATCAGGAGTCATG	GTTTCCAGGAGTGAGATTGATCTGTTTAACATCAGGAAGGA	ACCTCTCTTTATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTG 	CTGCTCTCCGGAGAAGATGAC 981 -
1 1 61	61 121 121	181	241	301	361	421	481	541	601	661	721	781	841	901	961
oy oy	g do ga	oy Oy	oy Oy	දුරු පු	දු දු	à g	oy Dp	è a	Qy Dp	oy Oy	Qy	oy op	Oy Dp	Oy Dp	oy D

AAC91369 standard; DNA; 981 BP

RESULT 3
AAC91369
ID AAC9:

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181 TCTGCAGCTTTTAAGACTCTGTTTGGCAGGATCTTCTGGATGACCTGAAATCAGAACTA: 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 GGATTTGATGAGCGGGCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 GATGAGGAGAGCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present sequence encodes a modified annexin having an N-terminal chelation site, which comprises an amino acid extension including a glycine and a cysteine residue. The modified annexin is useful for imaging vascular thrombi or apoptosis which is associated with response to a chemotherapeutic agent or with rejection as a result of transplantation. The modified annexin can effectively chelate a radiounclide and retain annexin bloactivity. It can be readily prepared in high radiochemical yield and with high radiochemical purity. In contrast to conventional conjugation chemistries that provide a distribution of conjugation products, the modified annexin has a single chelation site remote from the site of biological activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241 ACTGGAAAATTTGAAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241 ACTGGAAAATTTGAAAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 ATGGCATGTGGCTGCGGTCATATGGCACAGGTTCTCAGAGGCACTGTGACTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                     Novel modified annexin useful for imaging vascular thrombi and apoptosis, has N-terminal chelation site comprising amino acid extension which comprises a glycine and a cysteine residue -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99.5%; Score 976.2; DB 22; Length 981; 99.7%; Pred. No. 3.3e-273; Indels 0; Mismatches 3; Indels 0;
                                                                                   Human; annexin; chelation site; nuclear imaging; apoptosis; transplant rejection; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 981 BP; 286 A; 187 C; 251 G; 257 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 26; Page 31-33; 39pp; English
                                                                                                                                                                                                                                                             99US-0324096.
                                                                                                                                                                                                                                25-MAY-2000; 2000WO-US14324.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 99.7 Matches 978; Conservative
                                                                                                                                                                                                                                                                                             (UNIW ) UNIV WASHINGTON
                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-080465/09.
P-PSDB; AAB50864.
                                                                                                                                                                                                                                                                                                                            Tait JF, Brown DS;
                                                                                                                                                                    WO200073332-A1
                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                               01-JUN-1999;
                                                                                                                                                                                                 07-DEC-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
Ş,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          q
```

```
The vascular anti-coagulating protein (VAC)-alpha encoded by this cDNA is used in the preparation of monoclonal antibodies (WAbs). The VAC-alpha is injected into a host animal, in conjugation with egy keyhole limpet haemocyanin, and the B-cells from the immunised hosts are then fused with myeloma calls. The resultant hybridomas (WAA-8 and VAA-9) produce Abs specific to VAC-alpha. The Abs can be used as immunoassay reagents to detect VAC proteins, as affinity ligneds for purificn. of VACs and as medicaments for binding and/or neutralising VAC proteins in vivo. See also ANN91334 and EP-181445.

(Updated on 10-MAR-2003 to acd missing OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGAC 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGA 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               34 TATGGCACAGGTTCTCAGAGGCACTGTGACTGCCTTCCCTGGATTTGATGAGCGGGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                   TGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGAGATGAGGAGAGCATCCTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTAGCAACTGGAAAATTTGAAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGTGGTGGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGA
                                                                                                                                                                                                                                                                                                                                     / Match 97.6%; Score 957.8; DB 10; Length 1466; Local Similarity 99.8%; Pred. No. 9e-268; nes 959; Conservative 0; Mismatches 2; Indels 0;
                                                                                                                 Monoclonal antibodies to vascular anti-coagulating proteins hybridomas producing such antibodies.
                                                                                                                                                                                                                                                                                                                Sequence 1466 BP; 423 A; 291 C; 327 G; 425 T; 0 other;
                                                                                                                                                   Disclosure; fig 1; 11pp; German.
                                  (BOEH ) BOEHRINGER INGELHEIM
           88DE-3810331
                                                                               WPI; 1989-293724/41
                                                                                          P-PSDB; AAP91953
         26-MAR-1988;
                                                                                                                                                                                                                                                                                                                                                                                      23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           261
                                                                                                                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                561
                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                    Best Loca
Matches
à
                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                   å
                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        οχ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                             GTGGTTCTCCTTCAGGCTAACAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAA 540
                                                                                                                                                                                                TTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTAC、660
                                                                                                                                                                                                                                             ATGACTATATCAGGATTTCAAATTGAGGAAACCATTGACCGGAGACTTCTGGCAATTTA 720
                                                                                                                                                                                                                                                                                          GAGCAACTACTCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAG 780
                                                                                                                                                                                                                                                                                                                780
                                                                                                                                                                                                                                                                                                                                       ACCCTCTATTATGCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATG 840
                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAGAATAT
                      ACCTCTCTTTATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTG
                                                                                                                                                  CAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAG
                                                                                                                                                                                                                                                                                                                                                                                   GGCTCAAGCCTGGAAGATGACGTGGTGGGGGACACTTCAGGGTACTACCAGCGGTGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                proteins; hybridomas; B-cells; myelomas;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Vascular anti-coagulating protein-alpha cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
35..996
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGCTCTCCGGAGAAGATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CIGCICTCCGGAGAAGAIGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /label-VAC-alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAN91353 standard; DNA; 1466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (updated)
(updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 88DE-3810331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Vascular anti-coagulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        - Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-MAR-2003
10-MAR-2003
30-JUL-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-MAR-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DE3810331-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chimeric
Chimeric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAN91353;
                               361
                                                                             121
                                                                                                     181
                                                                                                                           181
                                                                                                                                                                        541
                                                                                                                                                                                                601
                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                           841
                                                                                                                                                                                                                                                                                                                                                                                                                                  901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAN9135
                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                        셤
                                                                                                    ç
                                                                                                                                          õ
                                                                                                                                                                8
                                                                                                                                                                                             6 6
                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                  合
                                                                                                                                                                                                                                                                                                                                                                                                                                 ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
```

ö

140

93

200 213 260 273 320 333 500 513 560 573 620 633

S

ö

셤

셤 Š g

ò

a

ò a Š

ò

g

ŏ 셤

```
315
                                                                                                                                                                                                                                                                           195
                                                                                                                                                                                                                                                                                                                         255
                                                                                                                                                                                                                                                                                                                                                                                                                      375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             555
                                                                                                                                                                                                                                                                                                   141
                                                                                                                                                                                                                                                                                                                                                201
                                                                                                                                                                                                                                                                                                                                                                                               261
                                                                                                                                                                                                                                                                                                                                                                                                                                            321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                915
                                                                                                                                                                                                                                                     81
                                                         cription terminator in addition to the placental coagulation inhibitor gene. The polypeptide produced on culturing of transformed host cells exhibits strong anticoagulant activities and is useful for the treatment and prevention of eq thrombosis or disseminated intravascular coagulation in the brain, heart and peripheral blood vessels. (Updated on 10-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                  82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                              142 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                             262 ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                               Gaps
                                                binding site, initiation sequence, termination codon and a trans
                                                                                                                                                                                                                              ö
                                                                                                                                                                                                        Length
                                                                                                                                                                                                                              Indels
                                         promoter
                                                                                                                                                                                                     Score 956.8; DB 9;
Pred. No. 1.8e-267;
                                                                                                                                                                                                                              ä
                                                                                                                                                                               Sequence 1567 BP; 430 A; 332 C; 358 G; 447 T; 0
                                                                                                                                                                                                                              0; Mismatches
                                     recombinant DNA sequence comprises
                 7; p; English.
                                                                                                                                                                                                     97.5%;
99.8%;
                                                                                                                                                                                                                al Similarity 99.8
958; Conservative
                 Page
                 Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                   316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                928
                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                    Local
                                                                                                                                                                                                                              tches
    õ
                                                                                                                                                                                                                                                                        q
                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  οÿ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                          693
                                                740
                                                                      753
                                                                                               800
                                                                                                                     813
                                                                                                                                            860
                                                                                                                                                                  873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Recombinant placental coagulation inhibitor - useful for the prevention and treatment of thromboses or disseminated intra-vascular coagulation.
AATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGT
                                                          TGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAA
                                                                                                                 TGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAA
                                                                                                                                         GGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGA
                                                                                                                                                                                        TCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTTATTCCATGAT
                                                                                                                                                                                                   TAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGA
                                                                                                                                                                                                                                                  Placental coagulation inhibitor; disseminated vascular coagulation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag= a
/label=placental coagulation inhibitor
1568
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Plasmid contg. placental coagulation inhibitor gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ξ
                                                                                                                                                                                                                                                                                                                                                                     AAN81113 standard; DNA; 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               87JP-0037227
87JP-0184428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         88EP-0102468
                                                                                                                                                                                                                                                                                                                                                                                                                 (updated)
(updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Suda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          136..1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Iwasaki A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1988-236733/34.
WPI; 1991-329110/45.
P-PSDB; AAP80511.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (KOWA ) KOWA CO LID
                                                                                                                                                                                                                                                                                   C 981
                                                                                                                                                                                                                                                                                                          994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   thrombosis; ss
                                                                                                                                                                                                                                                                                                                                                                                                                25-MAR-2003
10-MAR-2003
12-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EP279459-A.
JP03219875-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19-FEB-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-JUL-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-FEB-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-AUG-1988
                                                                                                                                                                                                                                                                                                         O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Saino Y,
                                                                                                                  754
                                                                                                                                                                                                                                     921
                                                                                                                                                                                                                                                                                                                                                                                          AAN81113;
                                                                     694
                                                                                                                                         801
                                                                                                                                                                 814
                                                                                                                                                                                        861
                                                                                                                                                                                                                                                                                   981
                                                                                            741
                                               681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
                                                                                                                                                                                                                                                                                                                                                        AAN81113
```

ø

us-09-970-969-5.rng

```
This invention relates to a combination comprising several CDNAs that are differentially expressed in activated vascular tissue. The invention also discloses a high throughput method for detecting differentially expressed cDNAs in a sample. The CDNAs of the invention may have antiatrerlosclerotic; cytostatic; cardiant; hypotensive; antidiabetic; gynaecological; vasctropic and cerebroprotective activities and may be used in gene therapy. The cDNAs of the invention may be used in a molecule or compound that specifically binds a CDNA of the invention. A protein encoded by the CDNA may be used to screen several molecules or compounds to identify a molecule or compound that specifically binds a CDNA of the protein, or to produce or purify an antibody to the protein that can be used to detect a protein in a sample or purify an antural or recombinant protein from a sample. The uncleotides may be useful for diagnosing, staging, treating, or monitoring the progression of creaming the protein from a sample. The uncleotides may be useful for a vascular disease, e.g. atherosclerosis, cancer, coronary artery disease, hypertension, diabetes, pre-clampsia, ischaemia reperfusion injury, restenosis, or stroke. The cDNAs can also be used for large-scale genetic or gene expression analysis of several new
                                                                                       921
   861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Combination for diagnosing, staging, treating, or monitoring the progression of treatment of a vascular disease, e.g. atherosclerosis, comprises several cDNAs that are differentially expressed in activated
                  GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                     CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                                                                                                                                                                                                                                                                                          Human cDNA #162 differentially expressed in activated vascular tissue
                                                                                                                                                                                                                                                                                                                                                                                                              Human; gene; ss; vascular tissue; cytostatic; atherosclerosis; cardiant; hypotensive; antidiabetic; gynaecological; vasotropic; cerebroprotective; gene therapy; vascular disease; cancer; coronary; attery disease; hypertension; diabetes; pre-eclampsia; restenosis; ischaemia-reperfusion injury; stroke;
                                                                                                                                                                                                                                                                       вР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Page -; 18pp; English.
                                                                                                                                                                                                                                                                     ABX63162 standard; cDNA; 1578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-JAN-2002; 2002US-0044090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-JUL-2000; 2000US-222469P.
                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-110597/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BAND/) BANDMAN O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2002137081-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     vascular tissue
                                                                                                                                                                                                                                                                                                                                        25-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-SEP-2002,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                     ABX63162:
802
                                 916
                                                                     862
                                                                                                    946
                                                                                                                                            922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bandman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ношо
                                                                                                                                                                                                                                                      ABX63162
                                                                                                                                                                                                                                   RESULT
                                                                                                                                                                                                                                                                                      셤
                                                                                                 용
                                                                                                                                          ò
ò
                                                                     ç
                                                                                                                                                                          셤
```

```
201
                                                                                                                                                                                                                                                   141
                                                                                                                                                                                                                                                                       261
                                                                                                                                                                                                                                                                                                201
                                                                                                                                                                                                                                                                                                                         321
                                                                                                                                                                                                                                                                                                                                                261
                                                                                                                                                                                                                                                                                                                                                                          381
                                                                                                                                                                                                                                                                                                                                                                                                321
                                                                                                                                                                                                                                                                                                                                                                                                                        441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           921
                                                                                                                                                                                                                                                                                                                                                                                                                                                 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGTTTAACATCAGGAAGAGTTTAGGAAGAATTTTGCCACCTCTTTTATTCCATGATT 921
                                                            activated vascular tissue. Once: The sequence data for this patent did not form part of the special cation, but was obtained in electronic format directly from USPTO at http.seqdata.uspto.gov/sequence.html?DocID-20020137081.
                                                                                                                                                                                                  87
                                                  12
                                                                                                                                                                                                                                                                                                             262 ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
nucleic acid molecules. Antibodies to the proteins encoded by the cDNAs are useful for dispnosing pre-pathologic disorders, and chronic or acute diseases associated with abnormalities in the expression, amount or distribution of the protein. The present sequence represents a cDNA of the invention that is differentially expressed in
                                                                                                                                                                                               AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        502 GAACTGAGGCCATCAAACAAGTTTATGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTTCTCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGGCTGGAGACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     682 ATTGAGGAAACCATTGACCGGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 25; Length 1578;
                                                                                                                                                                         .;
0
                                                                                                                                                                          Indels
                                                                                                                         Sequence 1578 BP; 432 A; 335 C; 360 G; 451 T; 0 other;
                                                                                                                                                                            ñ
                                                                                                                                               Ouery Match 97.5%; Score 956.8; DB 2
Best Local Similarity 99.8%; Pred. No. 1.8e-267
Matches 958; Conservative 0; Mismatches 2
                                                                                                                                                                                                                                                                                                 142
                                                                                                                                                                                                                                                                                                                         262
                                                                                                                                                                                                                                                                                                                                                 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         622
                                                                                                                                                                                                                                                 82
                                                                                                                                                                                                                                                                                                                                                                          322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      862
  888888888888
                                                                                                                                                                                                  ö
                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                               οy
                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                οy
                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

음 ò 윱

```
1119
                                                                                                                                                                                                                                                                                                                                                                                            459
                                                                    441
                                                                                       579
                                                                                                                             639
                                                                                                                                                561
                                                                                                                                                                  669
                                                                                                                                                                                      621
                                                                                                                                                                                                        759
                                                                                                                                                                                                                           681
                                                                                                                                                                                                                                             819
                                                                                                                                                                                                                                                                  741
                                                                                                                                                                                                                                                                           801
                                                                                                                                                                                                                                                                                                                         939
                                                                                                                                                                                                                                                                                                                                             861
                                                                                                                                                                                                                                                                                                                                                               666
                                                                                                                                                                                                                                                                                                                                                                                  921
                                                                                                                                                                                                                                                                                                                                                                                                                      981
                               381
                                                                                                          501
                              CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
  GTGGGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGTAAC
                                                                                                                                                           CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                    AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGGTGGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                       CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                  ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                       GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                              GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                    GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              thromboplastin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAN90112 standard; DNA; 1575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Anticoagulant; PP4 protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1539..1575
/*tag= a
107..1066
/*tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Anticoagulant PP4 DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              polyA_signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-MAR-2003
01-NOV-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-JUN-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EP318703-A.
                                                                                                                                                              640
                                                                                                                                                                                                                                                                                                                                                                                                    1000
                                                                                                                                                                                                                                                                                                                                                                                                                      922
                                                                                                                                                                                                                                                                                                                                                                                                                                          1060
            100
                                                 460
                                                                                                          442
                                                                                                                             580
                                                                                                                                                502
                                                                                                                                                                                                        200
                                                                                                                                                                                                                           622
                                                                                                                                                                                                                                             260
                                                                                                                                                                                                                                                                 682
                                                                                                                                                                                                                                                                                   820
                                                                                                                                                                                                                                                                                                       742
                                                                                                                                                                                                                                                                                                                         880
                                                                                                                                                                                                                                                                                                                                            802
                                                                                                                                                                                                                                                                                                                                                                                  862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAN90112;
                               322
                                                                   382
                                                                                                                                                                                      562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAN90112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   õ
                                               a
                                                                                     Q
                                                                                                          οŽ
                                                                                                                            셤
                                                                                                                                                ð
                                                                                                                                                                g
                                                                                                                                                                                     ογ
                                                                                                                                                                                                     쉽
                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                            ογ
                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                  ŏ
            1041
                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AITGIGGCICTGAIGAAACCCTCTCGGCTTTATGAIGCTTATGAACTGAAACATGCCTTG 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                           Recombinant human endonexin II - which inhibits blood coagulation and phospholipase A2 and is used as an antiinflammatory agent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1605;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1605 BP; 447 A; 337 C; 366 G; 455 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          hENII is a calcium and phospholipid binding protein. (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97.5%; Score 956.8; DB 10
99.8%; Pred. No. 1.8e-267;
1ve 0; Mismatches 2;
                                                                                                                                                                                                                        Location/Qualifiers
160..1119
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; fig. 1; 13pp; English.
                                                                                                                                                                                                                                                                                                                                           (RORE ) RORER INT OVERSEAS INC
                                                                                               AAN91821 standard; DNA; 1605
                                                                                                                                                                                                                                                                                                                        88US-0176802.
                                                                                                                                                                                                                                                                                                     89EP-0105626
                                                                                                                                                                                    Placenta; blood coagulation
                                                                                                                                     (updated)
(first entry)
                                                                                                                                                                Endonexin II complete cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity 99.8 es 958; Conservative
                                                                                                                                                                                                        Homo sapiens (human).
                                                                                                                                                                                                                                                                                                                                                                                WPI; 1989-317181/44.
P-PSDB; AAP91021.
                                                                                                                                                                                                                                                                                                                                                              Jaye M;
                                                                                                                                                                                                                                                                                                     30-MAR-1989;
                                                                                                                                                                                                                                                                                                                        31-MAR-1988;
                                                                                                                                    25-MAR-2003
16-MAR-1990
                                                                                                                                                                                                                                                                                 02-NOV-1989
                                                                                                                                                                                                                                                               EP339285-A
                                                                                                                                                                                                                                                                                                                                                              Kaplan R,
          982
                                                                                                                  AAN91821;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Loca
Matches
                                                                                                                                                                                                                          Key
                                                                            RESULT 7
```

셤

ö

g

õ

염

õ

g

ò

ð

œ

```
946 TCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCCATGAT 1005
                                                                                                                                                                                                            945
                                               800
                                                                                                860
                                                                                                                                                920
                                                                       885
                                                                                                                                                                                                                                                                                                                                                                                                                                       carrier; thrombus; thrombolytic; fusion protein; fibrinolysis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 as a carrier molecule to build a thrombus-targeting thrombolytic fusion protein. The protein is the result of expression of a fusion gene (this sequence) comprising the Annexin V gene and a low-molecular urokinase gene, in insect cells. The Annexin V-scu-PA-32 fusion protein, expressed in insect cells train Tn-5B1-4, has high affinity for active
                                                                                                TGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAA
                                                            TCTGTTTAACATCAGGAAGGACTTTAGGAAGAATTTGCCACCTCTCTTTATTCCATGAT
                                                                                                                                                                                                 TAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGA
681 AATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           comprises
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualiflers
1..1803
/*tag= a //
/product= "annexin V/urokinase fusion protein"
/note= "no start or stop codons are given at the or 3' ends of the sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Annexin V, which has high affinity for active thrombocytes,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             •
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New thrombolytic fusion protein for targetting thrombus fusion of Annexin V and urokinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (SHAN-) SHANGHAI INST BIOCHEMISTRY CHINESE ACAD
                                                                                                                                                                                                                                                                                                                                                                                                               Annexin V/urokinase fusion construct.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chinese
                                                                                                                                                                                                                                                                                                                                     AAA11241 standard; DNA; 1803 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99CN-0113524.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99CN-0113524.
                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 2; Page 2-4; 20pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Annexin V; thrombocyte; urokinase; insect cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sun J, Yang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-413098/36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   P-PSDB; AAY92930
                                                                                                                                                                                                                                                                          1066 C 1066
                                                                                                                                                                                                                                                 981 C 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                      25-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CN1247195-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-MAR-2000
                                                                                                                                                                                                                        1006
                                                                                                                                                                                                                                                                                                                                                               AAA11241;
                                                 741
                                                                        826
                                                                                                                                                 861
                                                                                                                                                                                                 921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wu X,
                                                                                                                                                                                                                                                                                                              RESULT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Key
                       9
                                                 õ
                                                                       g
                                                                                                ò
                                                                                                                      a
                                                                                                                                                 ò
                                                                                                                                                                      g
                                                                                                                                                                                                 à
                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       345
                                                                                                                                                                                                                                                                                                                                                                                                               140
                                                                                                                                                                                                                                                                                                                                                                         225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          680
                                                                                                                                                                                                                                                                                                                                                               80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAAC
                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                              Length 1575;
                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                      New DNA sequence encoding anticoagulant PP4 protein - and new recombinant protein, vectors, antibodies, etc., useful therapeutically and diagnostically.
                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                    Sequence 1575 BP; 461 A; 322 C; 351 G; 441 T; 0 other;
                                                                                                                                                                                                                                                                                                              DB 10;
                                                                                                                                                                                             DNA sequence encoding anticoagulant PP4 protein. Inhibits blood coagulation at the thromboplastin The derived protein is 320 amino acids. (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PI field.) (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                      <u>ب</u>
                                                                                                                                                                                                                                                                                                           97.5%; Score 956.2; DB 10
99.7%; Pred. No. 2.7e-267
tive 0; Mismatches 3
                                                                        Ξ
                                                                         Kupper
                                                                                                                                                                       Claim 1; table 1; 14pp; German.
88EP-0118039
                       87DE-3737239
                                                                                                                                                                                                                                                                                                                       Local Similarity
nes 958; Conservative
                                               (BEHW ) BEHRINGWERKE AG.
                                                                        Abel KJ,
                                                                                                WPI; 1989-166767/23,
                                                                        Grundmann U,
29-OCT-1988;
                       03-NOV-1987;
                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                              21
                                                                                                                                                                                                                                                                                                                                                                                     106
                                                                                                                                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                     166
                                                                                                                                                                                                                                                                                                                                                                                                                                                             141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    902
                                                                                                                                                                                                                                                                                                                                    Matches
```

P Q

g

ç

유

õ

ò

8

음

ð

ö

g

 9 6

à

ò

SXS

ò a à 8 ö 셤 ò g ò 셤 ò g ò 셤 ç ద ò a õ 셤 ογ g õ

```
141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   142 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG 201
                                                                                                                                                                                           PAP-I; anticoagulant; anti-inflammatory agent; phospholipid; phospholipase A2; disseminated intravacular coagulation; human placenta; deep vein thrombosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human proteins having anticoagulant and antiinflammatory activity - isolated from biological fluid by anion-exchange chromatographoc media.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13 ATGCCACAGGTTCTCAGAGGCACTGTGACTGCACTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A human placenta cDNA library (Clontech) was screened to obtain this sequence. The cDNA does not contain a leader peptide sequence, indicating that PAP-I is probably not constitutively screted. The product binds to phospholipid and inhibits phopholipase A2. The protein can substitute heparin or other anticoagulants in the treatment of disseminated intravascular coagulation, deep vein thrombosis, or other disorders. It also has antiinflammatory
                                                                                                                                                                     PAP-1 cDNA from human placenta, used for anticoagulant production
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 1454;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1454 BP; 434 A; 280 C; 324 G; 416 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ٠.
س
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97.4%; Score 955.2; DB 9 99.7%; Pred. No. 5.1e-267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              properties. (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BLA;
                                                                              ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page ?; p; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Carter
                                                                                                                                                                                                                                                                                                             /product-PAP-I
                                                                              CDNA; 1454
                                                                                                                                                                                                                                                                                                                                                                                         88WO-US00340
                                                                                                                                                                                                                                                                                                                                                                                                              87US-0011782
87US-0059355
                                                                                                                               (updated)
(first entry)
                                                                                                                                                                                                                                                                                                 Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     957; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ZYMO) ZYMOGENETICS INC. (UNIW) UNIV WASHINGTON.
                                                                                                                                                                                                                                                                                   13..972
                                                                                                                                                                                                                                                                                              /*tag-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Irani MH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1988-235049/33
P-PSDB; AAP82317.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                             AAN82107 standard;
                 1800
                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                              06-FEB-1987;
05-JUN-1987;
                                                                                                                                                                                                                                                                                                                                                                                       05-FEB-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fujikawa K,
              AC.
                                                                                                                              25-MAR-2003
13-NOV-1990
                                                                                                                                                                                                                                                                                                                                      WO8805659-A
                                                                                                                                                                                                                                                                                                                                                              11-AUG-1988
               1799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                     AAN82107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                              Ношо
                                                     RESULT 10
                                                                  AAN82107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best
                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                     1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1738
                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 979
                                                                                                                                                   319
                                                                                                                                                                                                                                                                                                                                                              379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   559
                                                                                                                                                                                                                                                          259
                                                                                                                                                                                                                                                                                                                                                                                                              AAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATG 439
                                                                                                                             868
                                                                                                      79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1109 AAATTGAGGAAACCATTGACGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTG
                                                                                                                                                                                                                                                                                                                                                           320 TGAAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           740 ITGIGAAAICTATICGAAGTATACCIGCCTACCTIGCAGAGACCCICTATIATGCTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATG
                                                                                                                 620 CACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTG
                                                                                                   20 ATATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTG
                                                                                                                                                                                                                                                       TAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAGAGACCCTGATGCTGGATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAA
                                                                              Gaps
                                                                             ó
                                                   DB 21; Length 1803,
thrombocytes and has the fibrinolytic activity of urokinase
                                                                           Indels
                         Sequence 1803 BP; 495 A; 415 C; 462 G; 431 T; 0 other;
                                                  Score 955.6; DB 21
Pred, No. 4.3e-267;
0; Mismatches 4;
                                                 vuery Match
Best Local Similarity 99.6%;
Matches 95%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ğ
                                                                                                                                                                                                                                                                                                                                                                                                             380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               920
                                                                                                                                                                                                                                                                                                          260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  980
                                                                                                                                                                                                      140
                                                                                                                                                                                                                              959
                                                                                                                                                                                                                                                       200
```

원

g

õ

g

ð

8

ò

g

ò

ò

ö

Aug

Fri

```
Disclosure; Fig 7; 57pp; English
           PAP-I
                                                                                                                                                                                                                ó
                                                                                                                                                                                                       97.48;
                                                     89US-0459082
                                           90WO-US07335
13.,972
/*tag= a
/product= F
                                                                                                                                                                                                                 Conservative
                                                               (ZYMO ) ZYMOGENETICS
                                                                                     WPI; 1991-222905/30.
                                                                                                                                                                                                           Local Similarity
es 957; Conserv
                                                                                         P-PSDB; AAR13082
                                          13-DEC-1990;
                      W09109953-A
                                11-JUL-1991
                                                                          ä
                                                                                                                                                                                                                           22
                                                                                                                                                                                                                                                                              133
                                                                                                                                                                                                                                                                                         202
                                                                                                                                                                                                                                                                                                                        253
                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                         73
                                                                                                                                                                                                                                                                                                   193
                                                                                                                                                                                                                                                                                                                                   322
                                                                                                                                                                                                                                                                                                                                             313
                                                                                                                                                                                                                                                                                                                                                       382
                                                                                                                                                                                                                                                                                                                                                                  373
                                                                                                                                                                                                                                                                                                                                                                                      433
                                                                          Foster
                                                                                                                                                                                                                 vatches.
 SDS
 a
                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                           ç
                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                  요
                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                   g
                          252
                                               312
                                                                    372
                                                                               441
                                                                                    492
                                                                                                                                   552
                                                                                                                                                       612
                                                                                                                                                                            672
                                                                                                                                                                                                732
                                                                                                                                                                                                                                          852
                                                                                                                                                                                                                                                                        261
                                    321
                                                          381
                                                                                                    501
                                                                                                                        561
                                                                                                                                             621
                                                                                                                                                                  681
                                                                                                                                                                                      741
                                                                                                                                                                                                           801
                                                                                                                                                                                                                      792
                                                                                                                                                                                                                                861
                                                                                                                                                                                                                                                    921
ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                          AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                               GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                        CGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                      GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCCTTCAGGCTAAC
                                                                                                                                                                                                                               GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                           Phopholipid; binding protein; lipocortin; domain; vitamin K; PBP;
                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                             AAQ12679 standard; cDNA; 1460
                                                                                                                                                                                                                                                                                                                                  (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                 gla-domain; VKDP; ss
                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                  25-MAR-2003
30-SEP-1991
                                                                                                                                                      553
                                    262
                                                          322
               202
                                               253
                                                                                                                                                                                               673
                                                                   313
                                                                              382
                                                                                        373
                                                                                                   442
                                                                                                             133
                                                                                                                        202
                                                                                                                                  693
                                                                                                                                                                           613
                                                                                                                                                                                      682
                                                                                                                                                                                                           742
                                                                                                                                                                                                                                         793
                                                                                                                                                                                                                                                             853
                                                                                                                                                                                                                                                                        922
                                                                                                                                                                                                                                                                                  913
                                                                                                                                                                                                                                                                                                                      AAQ12679;
                                                                                                                                                                 522
                                                                                                                                                                                                                     733
                                                                                                                                                                                                                               802
                                                                                                                                                                                                                                                                                                                                                 PAP-I.
                                                                                                                                                                                                                                                                                                  RESULT 11
AAQ12679
                                                                                                                                                                                                                                                                                                                                                                                      Key
                                   ð
                                              g
                                                                 q
                                                                             õ
                                                                                       ద
                                                                                                  ò
                                                                                                           셤
                                                                                                                      à
                                                                                                                                 셤
                                                                                                                                                   g
                                                                                                                                                                 ò
                                                                                                                                                                          a
                                                                                                                                                                                    à
                                                                                                                                                                                              g
                                                                                                                                                                                                          õ
                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                   ð
                                                         õ
                                                                                                                                           õ
                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                        à
```

```
262 ATTGTGGCTCTGATGAAACCCTCTGGGCTTTATGATGCTTATGAACTGAAACATGCCTTG 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13 ATGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           142 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGGTGGGGGACACTTCAGGGTACTACCAGGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                        This sequence, or a fragment of it, is used in the construction of DNA sequences encoding hybrid phospholipid-binding proteins (PBP) comprising at least one lipocortin phopholipid binding domain (PBD), or of PAP-I, joined to a gla-domainless vitamin K-dependent protein, e.g. protein C or activated protein C. See AAQ12680-81 for such examples:
A human placenta cDNA library was screened using affinity-burified antibody against PAP-I in order to obtain this cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1460;
  proteins
and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1460 BP; 436 A; 280 C; 323 G; 421 T; 0 other;
Recombinant prodn. of hybrid phosphollpid-binding comprising lipocortin phospholipid-binding domain vitamin K-dependent protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 955.2; DB 12;
Pred. No. 5.1e-267;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                          (Updated on 25-MAR-2003 to correct PA fleld.)
```

ö

141 132

72

201

252

261

312

441 432

```
AATTGAGGAAACCATTGACCGCGGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGT
P-PSDB; AAP80714
                                                                                                                                                                                                                                                                 274
                                                                                                                                                                                                       141
                                                                                                                                                                                                                                                                                                               394
                                                                                                                                                                                                                                                                                                                                      454
                                                                                                                                                                                                                                                                                                                                                              514
                                                                                                                                                                                                                               201
                                                                                                                                                                                                                                                      261
                                                                                                                                                                                                                                                                                                    381
                                                                                                                                                                                                                                                                                                                            441
                                                                                                                                                                                                                                                                                                                                                   501
                                                                                                                                                                                                                                                                                                                                                                                                  621
                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                         681
                                                                                                                                        Best Loca
Matches
qq
                                                                                                                                                                                 ò
                                                                                                                                                                                            셤
                                                                                                                                                                                                       õ
                                                                                                                                                                                                                 q
                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                            Qγ
                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                   ŏ
                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                          ò
                                                                                    732
                552
                                      612
                                                   681
                                                              672
                                                                                               801
                                                                                                           792
                                                                                                                       861
                                                                                                                                   852
                                                                                                                                              921
                                                                                                                                                         912
                                                                                                                                                                     981
                                                                                                                                                                                                                                                                                                                                                                                                              ü
                            621
                                                                                                                                                                                                                                                                                                                                                                                                              Falkner
                                                                                                                                                                    CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                             CGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                         ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                              GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                     CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCCATGATT
                                                                                                                                                   Sequence encoding vascular anticoagulating protein (VAP) VAC-alpha
                                                                                                                                                                                                                                                                      Vascular anticoagulating protein (VAP) VAC-alpha; anticoagulant; antiitlammatory; phospholipase inhibitory.
                                                                                                                                                                                                                                                                                                                                                                                                              ပဲ
                                                                                                                                                                                                                                                                                                                                                                                                              Stratowa
                                                                                                                                                                                                                                                                                                                     2, page 160-161"
                                                                                                                                                                                                                                                                                                                                                                                                             ď
                                                                                                                                                                                                                                                                                                                                                                                                              Swetly
                                                                                                                                                                                                                                                                                                   Location/Qualifiers
35..997
/*tag= a
/note="claimed in claim
                                                                                                                                                                                                                                                                                                                                                                                                 (BOEH ) BOEHRINGER INGELHEIM INT GMBH
                                                                                                                                                                                                                                                                                                                                                                                                             o`
                                                                                                                                                                                                                                                                                                                                                                                                              Bodo
                                                                                                                                                                                                             ВР
                                                                                                                                                                                                                                                                                                                                                                                                            R, Maurer-Fogy I,
Reutlingsperger CMP;
                                                                                                                                                                                                            AAN80801 standard; DNA; 1466
                                                                                                                                                                                                                                                                                                                                                                   87DE-3710309.
87DE-3710364.
87DE-3710430.
87DE-3737367.
                                                                                                                                                                                                                                                                                                                                                        88WO-EP00266
                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                    (updated)
                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1988-292861/41
                                                                                                                                                                                                                                                                                                                                                                   28-MAR-1987;
28-MAR-1987;
28-MAR-1987;
04-NOV-1987;
                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                       26-MAR-1988;
                                                                                                                                                                                                                                   25-MAR-2003
12-SEP-1990
                                                                                                                                                                                                                                                                                                                                W08807576-A
                                                                                                                                                                                                                                                                                                         mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                            Sauptmann
                                      553
                                                  622
                                                              613
                                                                         682
                                                                                               742
                                                                                                         733
                                                                                                                      802
                                                                                                                                                                                                                       AAN80801;
                                                                                                                                                                                                                                                                                                                                                                                                                   Adolf G,
                                                                                                                                                                                                                                                           (Glu22).
                                                                                                                                                                                                       AAN80801
              g
                                   g
                                                         g
                                                                      ò
                                                                                 a
                                                                                           ò
                                                                                                       g
                                                                                                                   ò
                                                                                                                               쉽
                                                                                                                                            ò
                                                                                                                                                      g
                                                                                                                                                                   ò
                                                                                                                                                                            g
                                                                                                                                                                                                             ç
                                                 ò
```

```
140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            513
                                                                                        The DNA is produced by determining the amino acid sequence of isolated and highly purified VAPs, constructing DNA probes on the basis of this sequence, using the probes to search through suitable cDNA libraries, isolating cDNA that hybridises with the probes, by inserting the cDNA into a suitable vector, and using the vector to transform a host organism. VAC-alpha has anticoagulant activity under certain conditions, but loses this activity in the event of severe bleeding. It acts by inhibiting conversion of factor X to factor Xa and conversion of prothrombin to thrombin. It is structurally related to lipocortin I (Nature, 320, 77, 1986) and lipocortin II (Cell, 46, 191/120, 1986) and has similar antilinflammatory and phospholipase inhibitory activity. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94 TGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTTATATCAGGATTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21 TATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGGGGGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81 TGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u> ACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCA</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                              ő
                                                                                                                                                                                                                                                                                                                                                                                                         1466;
                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                   Sequence 1466 BP; 422 A; 289 C; 328 G; 424 T; 3 other;
                      agents,
                                                                                                                                                                                                                                                                                                                                                                                                       Score 954.6; DB 9;
Pred. No. 7.6e-267;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
vascular anti:coagulating proteins
                                                          Disclosure; Fig 4/1-4/3; 183pp; German
                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                         97.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 99.6 (es 957; Conservative
```

And

Fri

```
Query Match
Best Local S.
Matches 956
                                                                                                                                                                               121
                                                                                                                                                                                                                                      241
                                                                                                                                      82
                                                                                                                                                                 142
                                                                                                                                                                                             202
                                                                                                                                                                                                          181
                                                                                                                                                                                                                         262
                                                                                                                                                                                                                                                    322
                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                               382
                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                            442
                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                        502
                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                    295
                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                622
                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                           682
                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                      742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               862
 8888888888
                                                                                                          à
                                                                                                                       g
                                                                                                                                     ò
                                                                                                                                                9
                                                                                                                                                                ò
                                                                                                                                                                             q
                                                                                                                                                                                             à
                                                                                                                                                                                                       g
                                                                                                                                                                                                                        ç
                                                                                                                                                                                                                                   요
                                                                                                                                                                                                                                                 ó
                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                       οŽ
                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                 음
                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                          860
                                                        873
                                                                                                         Vascular anticoagulating protein (VAP) VAC-alpha; anticoagulant activity; antinflammatory; phospholipase inhibitory.
                                                                                                                                                                                                                                                                                                                                                                                                              Ġ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The DNA is produced by determining the amino acid sequence of isolated and highly purified VAPs, constructing DNA probes on the basis of this sequence, using the probes to search through suitable cDNA libraries, isolating cDNA that hybridises with the probes, by inserting the cDNA into a suitable vector, and using the vector to transform a host
                                                                                                                                                                                                                                                                                                                                                                                                              Falkner
                                         AATTCAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGT
            TCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGAT
                                                                                                  TAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGA
                                                                                                                                                                                                                               Sequence encoding vascular anticoagulating protein (VAP) VAC-alpha
                                                                                                                                                                                                                                                                                                                                                                                                              ပဲ
                                                                                                                                                                                                                                                                                                                                                                                                             Stratowa
                                                                                                                                                                                                                                                                                                                                                                                                                                                              etc
                                                                                                                                                                                                                                                                                                                                                                                                                                                               agents,
                                                                                                                                                                                                                                                                                                                                                                                                             ь,
                                                                                                                                                                                                                                                                                                                                                                                                             Swetly
                                                                                                                                                                                                                                                                                                                                                                                                                                                             antiflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                      New vascular anti:coagulating proteins useful as thrombin inhibitors, antiflar
                                                                                                                                                                                                                                                                                                                                                                                                             ó
                                                                                                                                                                                                                                                                                                                                                                                               (BOEH ) BOEHRINGER INGELHEIM INT GMBH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 2; Page 160-161; 183pp; German.
                                                                                                                                                                                                                                                                                     Location/Qualifiers
35..963
/*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                             Bodo
                                                                                                                                                                               BP,
                                                                                                                                                                                                                                                                                                                                                                                                             CMP.
                                                                                                                                                                                                                                                                                                                                                          87DE-3710364.
87DE-3710364.
87DE-3710430.
                                                                                                                                                                              DNA; 963
                                                                                                                                                                                                                                                                                                                                              88WO-EP00266
                                                                                                                                                                                                                                                                                                                                                                                 87DE-3737367
                                                                                                                                                                                                         (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                             R, Maurer-Fogy
Reutlingsperger
                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1988-292861/41.
P-PSDB; AAP80242.
                                                                                                                                                                             AAN80873 standard;
                                                                                                                             981
                                                                                                                                           994
                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                              26-MAR-1988;
                                                                                                                                                                                                                                                                                                                                                          28-MAR-1987;
28-MAR-1987;
28-MAR-1987;
                                                                                                                                                                                                         25-MAR-2003
12-SEP-1990
                                                                                                                                                                                                                                                                                                                 WO8807576-A
                                                                                                                             O
                                                                                                                                         - v
                                                                                                                                                                                                                                                                                             mat_peptide
                                                                                                                                                                                                                                                                                                                               36-0CT-1988
                                                                                                                                                                                                                                                                                                                                                                                 04-NOV-1987
                                                                                                                                                                                                                                                                                                                                                                                                             Hauptmann |
Adolf G, |
                                                                                                              934
                                                                                                                                                                                           AAN80873;
                                                       814
                                                                     861
                                                                                                  921
                                                                                                                             981
                                                                                                                                           994
                                                                                                                                                                                                                                      (Asp22)
                                                                                                                                                                 RESULT
AAN8087
                          a
                                                    셤
                                                                                  a
                                                                                                             g
                                                                                                                                        a
                                                                                                                                                                              ò
                                         ò
                                                                     ò
                                                                                               ò
                                                                                                                             ç
```

```
ö
                                                                                                                                                                                                                                                                             141
                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                   201
                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                          261
                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 840
organism. VAC-alpha has anticoagulant activity under certain conditions, but loses this activity in the event of severe bleeding. It acts by inhibiting conversion of factor X to factor Xa and conversion of prothrombin to thrombin. It is structurally related to lipocortin (Nature, 320, 77, 1986) and lipocortin II (Cell, 46, 191/120, 1986) and Ass similar antiinfalmamatory and phospholipase inhibitory activity. (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     861
                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             921
                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGGCTGGAGAACTTAAATGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCCATGATT
                                                                                                                                                                                                                      22 ATGCCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                               AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTGAGGAAACCATTGACCCCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                          Gaps
                                                                                                                                                                                          ó
                                                                                                                                                               963;
                                                                                                                                                               Length
                                                                                                                                                                                          Indels
                                                                                                                                   Sequence 963 BP; 284 A; 183 C; 242 G; 254 T; 0 other;
                                                                                                                                                               ė,
                                                                                                                                                             Score 953.6; DB 9;
Pred. No. 1.2e-266;
                                                                                                                                                                                          Mismatches
                                                                                                                                                                                          ;
                                                                                                                                                               97.2%;
                                                                                                                                                                            al Similarity 99.6
956; Conservative
```

```
1042
                                                                                                                                                                                                                                                                                                                                                                                                                                          742
                                                                                                                                                                                                                                                                                                         862
                                                                                                                                                                                                                                                                                                                                                                                   982
                                                                                                                                                                                                                                                                                                                                                                                                     921
                  321
                                    442
                                                       381
                                                                          502
                                                                                             441
                                                                                                               562
                                                                                                                                 501
                                                                                                                                                   622
                                                                                                                                                                      561
                                                                                                                                                                                         682
                                                                                                                                                                                                           621
                                                                                                                                                                                                                                                  681
                                                                                                                                                                                                                                                                   802
                                                                                                                                                                                                                                                                                       741
                                                                                                                                                                                                                                                                                                                            801
                                                                                                                                                                                                                                                                                                                                            922
                                                                                                                                                                                                                                                                                                                                                                861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; lung cancer associated protein; neuroprotective; cytostatic; cardioactive; immunomodulatory; muscular active; vulnerary; gastrointestinal, nephrotropic; antiinfective; gynecological; antibacterial; diagnosis; neural disorder; immune disorder; reproductive; proliferative disorder; wound healing; infectious disease; ds.
983 CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                       CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                        CGAAGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                             GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                      CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                                                  GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                        AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                        502 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                              GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ID 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lung cancer associated polynucleotide sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA; 1637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAF18269 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200055180-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-SEP-2000
                                      383
                                                                                                                                                     263
                                                                                                                                                                                           623
                                                                                                                                                                                                                                                                                                                                                                                                      862
 323
                                                        322
                                                                                                               503
                                                                                                                                  442
                                                                                                                                                                                                              295
                                                                                                                                                                                                                                                  622
                                                                                                                                                                                                                                                                                                                                                                 802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAF18269;
                   262
                                                                                             382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                       ద
                                                                                                             g
                                                                                                                                 à
                                                                                                                                                 a
                                                                                                                                                                       δy
                                                                                                                                                                                       dd.
Qy
                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                   ò
                                                      ò
                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGGCACAGGTTCTCAGAGGCACTGTGACTTGCCTGGATTTGATGAGCGGGCTGAT 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  261
841 CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTTTTTCCATGATT 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22 ATGCCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                Human lipocortin cpds. III, IV, V, and VI - used in treatment of arthritic, allergic, dermatologic, ophthalmic and collagen disorders involving inflammatory processes.
                                                                                                                                                                                                                                                                                                                                                                                                                                        Human lipocortin-V was isolated from a lambda gt10 human peripheral blood lymphocyte CDNA library with rat lipocortin-V cDNA of lambda RLipo V-1 as probe. Lipocortins are anti-inflammatory agents and can be used to treat arthrilic, allergic, dermatologic, ophthalmic, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 1574;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                              Human lipocortin-V; lambdaRLipo V-1; anti-inflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1574 BP; 428 A; 334 C; 366 G; 446 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 952; DB 10;
Pred. No. 4.5e-266;
0; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        See also AAP91362, AAN90598, and AAP91363.
                                                                                                                                                                                                                                                                                                                                      Browning JL;
                                                                                                                                                                                                              complement (143..1102)
                                                                                                                                                                                                    Location/Qualifiers
                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 4; fig 4; 32pp; English
                                                                                  AAN90599 standard; cDNA; 1574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 99.5%;
Matches 955; Conservative
                                                                                                                                                                                                                                                                              89EP-0301603
                                                                                                                                                                                                                                                                                                88US-0160866
                                                                                                                                                                                                                                                                                                                                     Pepinsky RB,
                                                                                                                                                                                                                                                                                                                                                     WPI; 1989-250486/35.
P-PSDB; AAP91363.
                                                                                                                        (first
                                                                                                                                           Human lipocortin-V
                                                                                                                                                                                                                                                                                                                   (BIOJ ) BIOGEN INC
                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                             20-FEB-1989;
                                                                                                                                                                                                                                                                                                26-FEB-1988;
                                                                                                                                                                                                                                                                                                                                     Wallner BP,
                                                                                                                        22-DEC-1989
                                                                                                                                                                                                             mat_peptide
                                                                                                                                                                                                                                                           30-AUG-1989
                                                                                                                                                                                                                                       EP330396-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               collagen
                                                                                                     AAN90599
                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
9
                  ð
                                    윤
```

```
polynucleotide sequences AAF17982 - AAF18424 encode human lung cancer associated proteins represented in AAB58106 - AAB58540. Lung cancer associated proteins and polynucleotide sequences, their agonists, and antagonists may have neuroprotective; cytostatic; cardioactive; cardioactive; finmunomodulatory; muscular active general; vulnerary; gastrointestinal general; nephrotropic; antiinfective; ginecological; or antibacterial activity. The invention and info includes antibodies specific for the activity. The invention also includes antibodies specific for the protein or polynucleotide sequences. The lung cancer associated polynucleotide sequences. The lung cancer associated chromosome identification, as chromosome markers, and for numerous other disorders such as neural; immune, muscular, reproductive, casearch purposes. The proteins may be used to treat disorders such as neural; immune, muscular, reproductive, castorintestinal, pulmonary, cardiovascular, renal, and proliferative disorders. The proteins may also be used in the treatment of wounds and infectious diseases. Polynucleotide sequences AAF18433 and peptide AAB58549 are used in the course of the invention for the sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          173 ATGCCACAGGTTCTCAGAGGCACTGTGACTGCCTGGATTTGATGAGCGGGCTGAT 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                               Lung cancer associated gene sequences, referred to as lung cancer antigens, useful for treatment, prevention, and diagnosis of disorders such as lung cancer -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGGCACAGGTTCTCAGAGGCACTGTGACTGCCTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            142 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 21; Length 1637;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1637 BP; 455 A; 349 C; 378 G; 450 T; 5 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 943.8; DB 21
Pred. No. 1.1e-263;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                   Claim 1; Page 746; 1425pp; English.
                                                                    GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sch 96.2%;
il Similarity 99.6%;
956; Conservative
                                   99US-0124270.
 08-MAR-2000; 2000WO-US05918.
                                                                                                                                                           WPI; 2000-587514/55.
P-PSDB; AAB58393.
                                                                    (HUMA-) HUMAN GENC
(ROSE/) ROSEN C A.
                                   12-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sednences
                                                                                                                         Ruben SM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
```

```
952 GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT 1011
                                                                                                                                                                                                                                                                                            741
                                                                                                                                                                                                                                      861
                                                                                                                                                                                                                                                                                 921
                                                                                                                                                                                                                                                                                                                           981
593 GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC 652
                    561
                                                               621
                                                                                  772
                                                                                                        681
                                                                                                                             831
                                                                                                                                                                      891
                                                                                                                                                                                            742 GIGAAAICTAITCGAAGTAIACCIGCCIACCITGCAGAGACCCICTAITAIGCIAIGAAG 801
                                                                                                                                                                                                                951
                                                              773 CGAAGTGT-NCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                        682 ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                               GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                 CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                                                                                                                                                                                                                                           AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC
                                                                                                          CGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                    502
                                         653
                                                                                                          622
                                                                                                                                                                                                                                       802
                                                                                                                                                                                                                                                                                 862
                                                                                                                                                                                                                                                                                                                           922
                                                                                                                             g
                                                                                                                                                                    g
                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                    셤
                    ò
                                        a
                                                               ò
                                                                                음
                                                                                                        ò
                                                                                                                                                   ŏ
                                                                                                                                                                                            à
                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                            ò
```

completed: August 28, 2003, 16:03:37 ne : 218.333 secs Search com Job time :

532

AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGGA 381

322

ò g ð g ò

473 382 533 442

413

AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA

GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC

GTGGTGGGGGACACTTCAGGGTACTACCAGGGATGTTGGTGGTTCTCCTTCAGGCTAAC 501

```
GenCore version 5.1.6
Copyright (c) 1993 · 2003 Compugen Ltd.
```

August 28, 2003, 15:43:40; Search time 2602.33 Seconds (without alignments) 15421.677 Million cell updates/sec 1 atggcatgtggctgcggtca......tgctctccggagaagatgac 981 OM nucleic - nucleic search, using sw model US-09-970-969-5 981 Title: Perfect score: Sequence: Scoring table: Run on:

IDENTITY_NUC Gapop 10.0 , Gapext 1.0

5777422 Total number of hits satisfying chosen parameters:

2888711 seqs, 20454813386 residues

Searched:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

gb_ro:* gb_sts:* gb_sy:* gb_un:* gb_vi:* em_ba:* em_fun:* 9b_htg: 9b_in:* 9b_om:* 9b_ov:* 9b_pat:* 9b_ph:* 9b_pl:* em_hum:• em_in:* em_mu:* em_or:* em_pat:* em_om:* gb_ba:* GenEmb1:* •• Database

em_htgo_mus:*
em_htgo_other:* em_htg_other:* em_htgo_hum:* em_v1:* em_htg_hum:* em_htg_inv:* em_htg_mam:* em_htg_vrt:* em_sy:* em_htg_mus:* em_htg_pln:* em_htg_rod:* em_ro:* em_sts:* em_un:*

Pred. No. is the number of results predicted by chance to have a

JM Unclassified.

JE 1 (bases 1 to 981)

RS Tait,J.F. and Brown,D.S.

Annexin derivative with endogenous chelation sites

Annexin derivative with endogenous chelation sites

Annexin derivative with endogenous chelation sites

Ant. Patent: US 6323313-A 5 27-NOV-2001;

Location/Qualifiers

REFERENCE AUTHORS TITLE JOURNAL FEATURES

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Ouery Ouery Ouery Elizabeth DB. ID Ouery			d			SUMMARIES		•
911 100.0 912 100.0 913 6 AR222471 57.8 97.6 1466 6 AN222470 57.8 97.6 1466 6 AN222469 57.8 97.6 1539 9 BC012822 57.8 97.6 1539 9 BC012822 56.8 97.5 1539 9 BC012822 56.8 97.5 1444 6 101745 56.8 97.5 1444 6 101745 56.8 97.5 1560 9 HOWATC 56.8 97.5 1560 6 E01916 56.8 97.5 1574 6 10744 49.4 76.4 1480 10 MORANXY 49.4 76.4 1480 10 MORANS93 40.4 1477 6 AN305384 40.1 40.1 10.1 10 RAPLCS 573 584 1229 5 CHANCCAA 49.4 50.4 1477 6 AN305384 40.4 49.1 40.1 10.1 10.1 10.1 10.1 10.1 10.1 10	κ	core			DB.	οι	10	ption
76.2 99.5 981 6 ARX22467 76.2 99.5 981 6 ARX22467 76.2 99.5 981 6 ARX22467 76.2 99.5 981 6 ARX22467 57.8 97.6 1466 9 BC004993 57.8 97.6 1539 9 BC012822 56.8 97.5 1539 9 BC012822 56.8 97.5 1444 9 HUMATC 56.8 97.5 1444 9 HUMATC 56.8 97.5 1444 9 HUMATC 56.8 97.5 1566 9 E01316 56.8 97.5 1566 9 HUMACC 56.8 97.5 1566 9 HUMACC 56.8 97.5 1566 6 E01316 56.8 97.5 1566 6 E01311 56.8 97.5 1566 6 E01316 56.8 97.5 1566 6 E01316 56.8 97.5 1566 6 E01311 56.8 97.5 1567 6 133411 56.8 97.5 1568 9 HUMACC 56.8 97.5 1568 9 HUMACC 56.8 97.5 1568 9 HUMACC 56.8 97.5 1609 9 BC018671 49.4 1656 6 E14351 56.2 97.4 1415 10 MCSANCV 49.4 76.4 1480 10 MWAU2936 47.8 76.2 1574 6 10734 49.4 76.4 1480 10 ARV251895 57.7 74.1 1417 10 ARV25185 57.7 74.1 1417 6 AX101930 727 74.1 1417 6 AX101930 727 74.1 1417 6 AV1773 728 49.2 1619 9 BC018671 48.3 6 A01773 729 74.1 1417 5 OLANNEXM2 35.9 36.6 2055 4 BCCHR4 57.9 36.1 1074 5 AY178799 72.1 1417 5 OLANNEXM2 35.9 36.6 2055 4 BCCHR4 57.9 36.1 1074 5 AY178799 72.1 1417 5 OLANNEXM2 35.9 36.6 2055 4 BCCHR4 57.9 36.1 1074 5 AY178799 72.1 1417 10 ARV25141 57.1 36.4 1508 4 BOVP33113. 72.2 37.4 36.4 1508 4 BOVP33113. 72.4 16 36.1 1074 5 AY178799	1		•		+	: :		•
76.2 99.5 991 6 AR262470 57.8 97.6 1466 6 A07367 57.8 97.6 1539 9 BC012804 57.8 97.6 1539 9 BC012804 55.8 97.6 1539 9 BC012804 55.8 97.5 1539 9 BC012802 56.8 97.5 1432 6 A01769 56.8 97.5 1444 9 HUMATC 56.8 97.5 1464 6 10882 56.8 97.5 1566 6 E01816 56.8 97.5 1566 9 HUMBUL 56.8 97.5 1566 6 E01816 56.8 97.5 1574 6 107344 56.9 97.5 1574 6 107341 56.9 97.5 1574 6 107344 56.9 97.5 1574 6 107344 56.9 97.5 1574 6 107341 56.9 97.5 1574 6 107341 56.9 97.5 1574 6 107344 56.9 97.5 1574 6 107341 56.9 97.5 1574 6 107341 56.9 97.5 1574 6 107341 56.9 97.5 1574 6 107341 56.9 97.5 1574 6 107341 56.9 97.5 1574 6 107341 56.9 97.5 1574 6 107341 56.9 97.5 1574 6 107341 56.9 97.5 1574 6 107341 56.9 97.5 1574 6 107341 56.9 97.5 1574 6 107341 57.7 17 17 17 17 17 17 17 17 17 17 17 17 17	σ	א ע		981		4.0	ARZOZA	
57.8 97.6 1466 6 A07367 57.8 97.6 1536 9 BC002403 57.8 97.6 1539 9 BC012804 57.8 97.6 1539 9 BC012804 56.8 97.5 1432 6 107345 56.8 97.5 1444 6 10832 56.8 97.5 1444 6 10832 56.8 97.5 1444 6 10832 56.8 97.5 1566 6 E01816 56.8 97.5 1567 6 133410 56.8 97.5 1567 6 13341 56.8 97.5 1605 6 107181 56.8 97.5 1605 6 10773 727 74.1 1417 6 AX401930 727 74.1 1417 6 AX401930 727 74.1 1417 6 AX401930 727 74.1 1417 5 CLANNEXM2 38.9 36.6 2055 4 BCMNEXM2 38.9 36.6 2055 4 BCMNEXM2 38.0 1074 5 AX178799 AX178799 AX262471 AR262471 G1:28073915	101	76.2	: :	981		AR262470	AR262	
57.8 97.6 1536 9 BC004993 57.8 97.6 1539 9 BC012804 55.8 97.6 1539 9 BC012804 55.8 97.5 1539 9 BC012804 55.8 97.5 1582 9 HUMPAR4 55.8 97.5 1444 9 HUMATC 55.8 97.5 1444 9 HUMATC 55.8 97.5 1444 9 HUMATC 55.8 97.5 1444 9 HUMACC 55.8 97.5 1560 9 HSVAC 55.8 97.5 1560 9 HUMBCI 556.8 97.5 1566 9 HUMBCI 556.8 97.5 1574 9 HUMLCS 556.8 97.5 1574 9 HUMLCS 556.8 97.5 1574 9 HUMLCS 556.8 97.5 1574 9 HUMBCI 556.8 97.5 1574 6 133411 556.2 97.4 1415 10 MUSANXV 49.4 76.4 1480 10 MUS9396 47.7 74.1 1417 10 AX401930 727 74.1 1417 5 CURANNXX 74.9 76.4 1579 5 D64134 76.4 1480 6 A01774 76.4 1579 5 D64134 76.4 1579 5 D64134 76.4 1579 5 D64134 76.4 1579 5 D64134 77.4 48.3 6 A01773 77.8 48.3 6 A01773 77.8 48.3 6 A01773 77.9 74.1 1074 5 AV178799	٠.	57.8		1466	9	A07367	A0736	.muscu
55.8 97.6 1539 9 BC012822 56.8 97.6 1539 9 BC012822 56.8 97.5 1444 9 HUMATC 56.8 97.5 1444 9 HUMATC 56.8 97.5 1444 9 HUMATC 56.8 97.5 1560 9 HSVAC 56.8 97.5 1560 9 HSVAC 56.8 97.5 1560 9 HSVAC 56.8 97.5 1566 9 HUMBCI 56.8 97.5 1574 9 HUMBCI 56.8 97.5 1574 9 HUMBCI 56.8 97.5 1574 9 HUMBCI 56.8 97.5 1574 9 HUMBCI 56.2 97.4 156 6 E14351 56.2 97.4 166 107344 56.2 97.4 1480 10 MCSANXV 49.4 76.4 1480 10 MCSANXV 49.4 76.4 1480 10 MCSANXV 49.4 76.4 1480 6 AX30394 47.8 76.4 1480 10 AF051895 57.7 74.1 1417 10 AF051895 57.7 74.1 1417 10 AF051895 57.7 74.1 1417 10 AF051895 57.8 48.3 40.4 1480 6 A01774 48.3 49.2 480 6 A01774 48.3 49.1 49.1 480 6 A01774 48.3 49.1 49.1 5 GLANEXMZ 35.9 36.6 2055 4 BOVENDINX 35.9 36.6 2055 4 BOVENDINX 36.1 1074 5 AX178799 ARZ62471 GI:28073915 ARZ62471 GI:28073915	011	57.8	-	1536	σ,	BC004993	BC004	
57.8 97.6 1502 9 BUUNPAP4 56.8 97.5 156.8 97.5 1444 9 HUMAAP4 56.8 97.5 1444 9 HUMAAP4 56.8 97.5 1444 9 HUMAAC 56.8 97.5 156.9 9 HUMAC 56.8 97.5 157.4 9 HUMAC 9 HUMAC 56.8 97.5 157.4 148.1 10 MUJ 2039 6 10 HUM 2039 6 107181 1056.2 97.4 156.6 E14351 10 MUJ 2039 6 107181 1056.2 97.4 156.6 E14351 10 MUJ 2039 6 107181 1074 148.0 10 MUJ 2039 6 10718 1	J1 C	57. 10.00		1039	ם עם	BC012804	BC012	OHOHO
56.8 97.5 963 6 A01769 56.8 97.5 1432 6 107345 56.8 97.5 1444 9 HUWATS 56.8 97.5 1444 9 HUWATS 56.8 97.5 1454 6 108832 56.8 97.5 1454 6 108832 56.8 97.5 1586 6 E01816 56.8 97.5 1566 6 E01816 56.8 97.5 1567 6 133410 56.8 97.5 1567 6 133410 56.8 97.5 1567 6 133410 56.8 97.5 1567 6 133410 56.8 97.5 1575 6 A01770 56.8 97.5 1605 6 107181 56.2 97.4 1566 6 E14351 56.2 97.4 1566 6 E14351 56.2 97.4 1566 6 E14351 56.2 97.4 1605 6 107181 57.7 74.1 1417 10 RATLC5 69.7 8 1028 10 AF051895 69.7 8 1028 10 AF051895 69.7 9 1028 10 AF051895 69.7 10 1417 10 RATLC5 69.7 9 1028 10 AF05184 69.1 1074 5 A1778799 69.2 1619 9 BOVP3341 69.2 1619 9 BOVP3341 69.3 96.6 2055 4 BOVP3341 69.3 96.6 2055 4 BOVP3341 69.3 96.6 2055 4 BOVP3341 69.4 99.1 1074 5 A1778799 69.5 10 RAC62471 69.2 11074 5 A1778799 69.5 10 RAC62471 69		57.8		1582	n o	HUMPAP4	M1938	
56.8 97.5 1432 6 107345 56.8 97.5 1444 9 HUMATC 56.8 97.5 1444 9 HUMATC 56.8 97.5 1454 6 108832 56.8 97.5 1560 9 HSVAC 56.8 97.5 1566 6 E01816 56.8 97.5 1566 6 E01816 56.8 97.5 1566 6 E01816 56.8 97.5 1567 6 133410 56.8 97.5 1567 6 133410 56.8 97.5 1567 6 133410 56.8 97.5 1567 6 133410 56.8 97.5 1575 6 A13845 56.2 97.4 1566 6 E14351 56.2 97.4 1566 6 E14351 56.2 97.4 1566 6 E14351 56.3 97.2 1679 9 HUMENN 56.8 97.2 1679 9 HUMENN 56.8 97.5 1575 6 A13845 56.2 97.4 1566 6 E14351 56.2 97.4 1566 6 E14351 56.3 97.2 1679 9 HUMENN 56.3 97.2 1679 9 HUMENN 57.7 74.1 1417 10 MCSANXV 49.4 76.4 1480 10 MWC2936 47.8 1028 10 CA134 49.4 76.4 1480 10 AF051895 57.3 58.4 1279 5 CA13882 69.5 70.8 1028 10 AF051895 69.5 70.8 1028 10 AF051882 69.5 70.8 1028 10 AF0518383 73.8 48.3 48.3 6 A01773 73.8 48.3 48.3 6 A01773 74.4 36.4 1508 4 BOVP3341 56.4 36.1 1074 5 AX178799 78.6 2055 4 BYCHR4 78.7 4 36.4 1508 4 BOVP3341 78.6 2055 7 4 BYCHR4 78.7 4 36.4 1508 4 BOVP3341 78.6 36.1 1074 5 AX178799 78.6 2055 4 BYCHR4 78.6 36.1 1074 5 AX178799 78.6 2055 4 BYCHR4 78.7 4 36.4 1508 4 BOVP3341 78.8 48.2 48.3 48.3 48.3 48.3 48.3 48.3 48.3 48.3		56.8		963		A01769	A0176	
556.8 97.5 1444 9 HUMATC 556.8 97.5 1444 9 HUMATC 556.8 97.5 1589 6 E01812 556.8 97.5 1560 9 HSVAC 556.8 97.5 1566 6 E01816 556.8 97.5 1566 6 E01805 556.8 97.5 1566 6 E01805 556.8 97.5 1566 9 HUMBCI 556.8 97.5 1567 9 HUMBCI 556.8 97.5 1574 9 HUMBCI 556.8 97.5 1574 6 107181 556.2 97.4 1566 6 A01770 557.2 97.4 963 6 A01770 557.2 97.4 1415 10 MMUZ9396 727 74.1 1417 6 AX401930 727 74.1 1417 5 BC043862 695 70.8 1029 9 CHXANCC2A 76.4 1480 6 A01773 77.7 74.1 1417 5 D64134 49.4 56.4 1480 6 A01773 72.7 74.1 1477 5 D64134 49.4 56.4 1480 6 A01773 72.7 74.1 1477 5 D64134 72.7 74.1 177 5 D74134 72.7 74.1 177 5 D64134 73.9 36.6 2055 4 BOVENDNX 73.9 36.6 2055 4 BOVENDNX 73.9 36.6 2055 4 BOVENDX 74.6 36.1 1074 5 AY178799	٠,	56.8	_	1432		I07345	10734	
56.8 97.5 1434 6 108832 56.8 97.5 1536 9 BC001429 56.8 97.5 1566 9 HSVAC 56.8 97.5 1566 9 HUMBCI 56.8 97.5 1566 9 HUMBCI 56.8 97.5 1566 9 HUMBCI 56.8 97.5 1567 6 133410 56.8 97.5 1576 6 133410 56.8 97.5 1576 6 133411 56.2 97.4 1566 6 A01770 56.2 97.4 1619 9 BC018671 49.4 76.4 1480 6 AX305384 49.4 76.4 1480 10 MWUSANS 56.2 97.2 1574 6 107316 727 74.1 1417 10 RATLC5 695 70.8 1028 10 BC003716 727 74.1 1417 10 RATLC5 695 70.8 1028 10 BC013862 727 74.1 1417 5 BC043862 727 74.1 1417 5 BC043862 727 74.1 1417 5 BC043863 727 74.1 1417 5 BC043863 728 74.6 1477 5 BC043863 73.8 48.3 480 6 A01773 73.8 48.3 480 6 A01773 73.8 48.3 480 6 A01773 73.8 48.3 480 6 A01773 73.9 36.6 2055 4 BOVENDNX 359 36.6 2055 4 BOVENDNX 350 36.7 3 BOVENDNX 350 36.7 3 BOVENDNX 350 36.8 3 BOVENDNX 360 360 360 360 360 360 360 360 360 360	011	56.8	_	1444		HUMATC	M1836	
56.8 97.5 1538 9 BC0014429 56.8 97.5 1566 6 E01816 56.8 97.5 1566 6 E01816 56.8 97.5 1566 6 E01816 56.8 97.5 1566 9 HUMLCS 56.8 97.5 1567 6 133410 56.8 97.5 1574 9 HUMLCS 56.8 97.5 1575 6 A13845 56.2 97.4 1566 6 E14351 56.2 97.7 1574 6 107184 49.4 76.4 1415 10 MUS2936 49.4 76.4 1415 10 MUS2936 47.8 76.2 1619 9 E0018671 49.4 76.4 1417 10 RATLC5 69.5 70.8 1028 10 AR0139 727 74.1 1417 10 RATLC5 69.5 70.8 1028 10 AR01382 727 74.1 1417 5 E004382 727 74.1 1417 5 E004382 728 49.1 49.1 6 A0173 73.8 48.3 49.2 6 A0173 73.8 48.3 49.2 6 A0173 73.8 48.3 49.1 6 BOVENDNX 35.9 36.6 2055 4 BOVENDNX 35.9 36.6 2055 4 BOVP341 57.4 36.4 1508 4 BOVP341 57.4 36.4 1074 5 AX178799 8.2 1174 5 AN178799 8.2 1174 5 AN178799 8.3 36.6 2055 4 BOVP341 57.4 36.4 1508 4 BOVP3341 57.4 36.4 16128073915 8.4 50.4 16128073915	01 6	80.0	_	1454			10883	2 Sequence 3
Second Part	J1 Q	90. 10. 10.		1538		7	BCC00I	4.29 HOMO Sapi
56.8 97.5 1566 6 E03096 56.8 97.5 1566 9 HUMBCI 56.8 97.5 1566 9 HUMBCI 56.8 97.5 1567 9 HUMBCI 56.8 97.5 1592 9 HUMBLN 56.8 97.5 1592 9 HUMBNN 56.8 97.5 1692 6 107181 55.2 97.4 963 6 A01770 55.2 97.4 963 6 E14351 55.2 97.4 1556 6 E14351 53.6 97.2 1574 6 107344 49.4 76.4 1480 10 MUS2936 47.4 1480 10 MUS2936 47.4 1480 6 AX305384 49.4 76.4 1480 10 MUS2936 72.7 74.1 1417 6 AX401930 72.7 74.1 1417 6 AX401930 72.7 74.1 1417 6 AX401930 72.7 74.1 1417 5 BC043882 72.7 74.1 1417 5 AX401930 72.7 74.1 1417 5 AX178799 81.4 49.1 48.3 6 A01773 81.4 49.1 48.3 6 A01773 81.4 49.1 1074 5 AX178799 82.6 2055 4 BOVENDNX 83.9 36.6 2055 4 BOVENDNX 84.4 36.4 1508 6 A01773 85.1 1074 5 AX178799 87.6 36.1 1074 5 AX178799 87.6 36.1 1074 5 AX178799 87.6 2051 1074 5 AX178799 87.6 2051 1074 5 AX178799 87.7 77 77 77 77 77 77 77 77 77 77 77 77	,,	56.8		1566	n w	E01816	E0181	6 cDNA encodi
156.8 97.5 156.9 HUMBCI 156.8 97.5 1557 6 133410 156.8 97.5 1557 6 133410 156.8 97.5 1579 9 HUMENN 156.8 97.5 1579 9 HUMENN 156.2 97.5 1575 6 A01770 157.2 97.4 963 6 A01770 157.3 97.2 1574 6 107344 153.6 97.2 1574 6 107344 153.6 97.2 1574 6 107344 153.6 97.2 1519 9 MOUSANYN 149.4 76.4 1480 6 AX305384 49.4 49.1 6 AX4002A 48.3 49.2 5 C4134 48.3 48.3 48.0 6 A01773 48.4 49.1 49.0 6 A01773 48.3 48.3 48.0 6 A01773 59.4 50.5 4 BOVENDNX 59.5 5 5 A178799 54.6 36.1 1074 5 AX178799 54.6 36.1 1074 5 AX178799 54.6 36.1 1074 5 AX178799 54.6 36.1 1074 5 AX178791 54.6 36.1 GI:28073915 50.6 50.6 50.6 50.6 50.6 50.6 50.6 50.6 50.6 50.6 50.6 50.6 50.6		56.8		1566	φ	E03096	E0309	6 DNA encodin
756.8 97.5 1567 6 133410 556.8 97.5 1557 6 133410 556.8 97.5 1574 9 HUMLCS 556.8 97.5 1572 9 HUMENN 556.2 97.5 1572 6 A13845 557.2 97.4 1565 6 E14351 553.6 97.2 1574 6 107341 553.6 97.2 1574 6 107341 553.6 97.2 1574 6 107341 553.6 97.2 1574 6 107341 553.6 97.2 1574 6 107344 49.4 76.4 1480 10 MWUSANSW 49.4 76.4 1480 10 MWUSANSW 49.4 76.4 1480 10 MWUSANSB 727 74.1 1417 10 RATLC5 695 70.8 1028 10 BC003716 727 74.1 1417 10 RATLC5 695 70.8 1028 10 BC01318 727 74.1 1417 5 BC043862 728 49.3 49.2 48.3 49.2 6 A01774 73.8 48.3 49.2 6 BOVENDNX 359 36.6 2055 4 BOVENDNX 359 36.7 1071 1071 1071 1071 1071 1071 1071 10	0.	56.8		1566	on I	HUMBCI	D0017	2 Homo sapien
156.8 97.5 1574 9 HUMLCS 156.8 97.5 1574 9 HUMLCS 156.2 97.5 1592 9 HUMENN 156.2 97.5 1592 9 HUMENN 156.2 97.4 1566 6 E14351 153.6 97.2 1679 6 E14351 153.6 97.2 1679 9 BC018671 149.4 76.4 1415 10 MUSANXV 149.4 76.4 1480 10 MW129396 140.4 76.4 1480 10 MW129396 172.7 74.1 1417 10 RATLC5 157.7 74.1 1417 10 RATLC5 157.4 18.3 6 A01773 173.8 48.3 48.3 6 A01773 173.8 48.3 6 A01773 173.8 48.3 49.1 1074 5 AY178799 174.6 36.1 1074 5 AY178799 175.7 4 36.4 1074 5 AY178799		26.8		1567	φ,	133410	13341	0 Sequence 2
156.8 97.5 1575 6 107181 156.2 97.5 1575 6 107181 155.2 97.4 1566 6 E14351 153.8 97.2 1574 6 107344 153.6 97.2 1579 9 BC018671 149.4 76.4 1480 10 MUSANXV 149.4 76.4 1480 10 MUSASS 177 74.1 1417 10 RATLC5 153.5 570.8 1028 10 BC00716 177 74.1 1417 10 RATLC5 155.3 58.4 1229 5 CHRANCC2A 157.3 58.4 1279 5 D64134 149.4 49.1 483 6 A01773 154.4 50.4 1579 5 D64134 159.3 6 2055 4 BYCHRA 159.3 36.6 2055 4 BYCHRA 159.3 36.6 2055 4 BYCHRA 157.4 36.4 1074 5 AX178799 157.4 36.1 1074 5 AX178799 154.6 36.1 1074 1 BYCHRA 154.6 36.1 1074 5 AX178799	٠.٠	20.00		1574	ס ת	HUMICS	M21/3	1 Human 11poc
155.2 97.5 1575 6 A13845 155.2 97.4 963 6 A01770 155.2 97.4 963 6 A01770 153.6 97.2 1576 6 133411 153.6 97.2 1574 6 107344 153.6 97.2 1574 6 107344 153.6 97.2 1574 6 107344 149.4 76.4 1480 10 MU30396 149.4 76.4 1480 10 MU30396 152.7 14.1 1417 10 MEATLC5 152.7 14.1 1417 10 MEATLC5 152.7 14.1 1417 10 MEATLC5 152.8 122.9 5 CHKANCC2A 147.7 5 BC043882 152.4 54.6 1477 5 BC043882 153.4 54.6 1477 5 BC043882 154.6 1477 5 DLANNEXA 155.4 1477 5 DLANNEXA 157.8 483 6 A01773 157.8 484 6 A01773 157.8 485 6 A01773		56.8		1605	nφ	107181	10718	1 Sequence 12
155.2 97.4 963 6 A01770 155.2 97.4 963 6 A01770 155.2 97.4 1566 6 E14351 153.6 97.2 1574 6 107344 153.6 97.2 1574 6 107344 153.6 97.2 1619 9 BC018671 149.4 76.4 1480 6 AX305384 49.4 76.4 1480 10 MW029396 47.8 76.4 1480 10 MW029396 47.8 76.1 1417 6 AX401930 727 74.1 1417 6 A01772 81.4 49.1 48.3 6 A01772 81.4 49.1 48.0 6 A01773 81.4 49.1 49.0 81.4 49.1 49.0 81.4 49.1 49.0 81.4 49.0 81.4 49.0 81.4 49.0 81.4 49.0 81.4 49.0 81.4 49.0 81.4 49.0 81.4 49.0 81.4 49.0 81.4 49.0 81.4 49.0 81.4 49.0 8	٠.	56.2		1575	9	A13845	A1384	5 H.sapiens P
155.2 97.4 1566 6 E14351 153.6 97.2 97.4 1566 6 E14351 153.6 97.2 97.5 133411 153.6 97.2 1574 6 107344 153.6 97.2 1574 6 107344 49.4 76.4 1480 6 Ax305384 49.4 76.4 1480 10 MMU29396 47.8 74.1 1417 10 RATLC5 655 70.8 1028 10 727 74.1 1417 10 RATLC5 655 70.8 1028 10 727 74.1 1417 10 RATLC5 72.4 50.4 1477 5 BC043862 73.8 48.3 48.3 6 A01774 73.8 48.3 48.0 6 A01774 73.8 73.0 73.0 73.8 73.0 73.0 73.8 73.0 73.0 73.8 73.0 73.0 73.8 73.0 73.0 73.8	٠.	55.2		963	9	A01770	A0177	O DNA sequenc
13.4 97.2 97.2 1574 6 107344 153.6 97.2 1574 6 107344 149.4 76.4 1415 10 MUSANXV 149.4 76.4 1415 10 MUSANXV 149.4 76.4 1416 10 MUSANXV 149.4 76.4 14180 10 MWU29396 147.8 76.2 1552 10 BC003716 177 74.1 1417 10 RATLC5 1557 74.1 1417 10 RATLC5 1557 58.4 1229 5 CHKANCC2A 1577 74.1 1417 5 BC043882 157.4 54.6 1477 5 BC043882 157.4 50.4 1579 5 D64134 181.4 49.1 483 6 A01773 173.8 48.3 480 6 A01773 173.8 48.3 480 6 A01773 173.8 48.3 1480 6 A01773 173.8 48.3 16.6 2055 4 BDCHNEXK 184.4 39.2 2055 4 BDCHNEXK 1859 36.6 2055 4 BDCHNEXK 1850 36.6 1074 5 AY178799 184.4 39.2 1074 5 AY178799 184.4 39.1 1074 5 AY178799 1850 4 BCCHNEXK 18	٠. ٠	55.2		1566	9	E14351	E1435	1 cDNA encodi
193.6 97.2 1519 9 ECO18671 49.4 76.4 1415 10 MUSANXV 49.4 76.4 1415 10 MUSANXV 49.4 76.4 1480 10 MMJ2936 47.8 76.2 1522 10 BCC01930 727 74.1 1417 6 AX401930 727 74.1 1417 10 RATLC5 695 70.8 1028 10 RPO51895 573 58.4 1229 5 CHRANCC2A 573 58.4 1229 5 CHRANCC2A 574 50.4 1579 5 BC043882 94.4 50.4 1579 5 BC043882 94.4 49.1 483 6 A01773 77.8 48.3 480 6 A01773 77.8 480 6 A	0 , 0	53.8		157	ωu	133411	13341	1 Sequence 4
49.4 76.4 1415 10 MUSANXV 49.4 76.4 1415 10 MUSANXV 49.4 76.4 1480 6 AX305884 47.8 76.2 1480 10 MWU29396 727 74.1 1417 6 AX401930 727 74.1 1417 10 RATLC5 695 70.8 1028 10 AF051895 573 58.4 1229 5 CHKANCC2A 35.4 54.6 1477 5 B6013882 44.4 50.4 1579 5 D64134 48.4 49.1 483 6 A01773 73.8 48.3 6 A01773 73.8 48.3 6 A01773 73.8 48.3 6 A01773 74.4 39.2 1417 5 OLANNEXA2 35.9 36.6 2055 4 BOVENDNX 35.9 36.6 2055 4 BOVENDNX 35.1 1074 5 AX178799 ARICCATIL GI:28073915 UNKNOWN.	,. •	73.0		1619	ρσ	-	BLO/34	4 Sequence 20 671 Homo sapi
49.4 76.4 1480 6 AX305384 49.4 76.4 1480 10 MMU29996 47.7 74.1 1417 6 AX401930 727 74.1 1417 10 RATLC5 695 70.8 1029 5 CHKANCC2A 35.4 54.6 1477 5 BC043862 94.4 50.4 1229 5 CHKANCC2A 35.4 54.6 1477 5 BC043862 81.4 49.1 483 6 A01772 81.4 49.1 483 6 A01772 81.4 49.1 483 6 A01773 81.4 49.1 480 6 A01773 81.4 49.1 480 6 A01773 81.4 49.1 480 6 A01773 81.4 49.1 147 5 OLANNEXAL 359 36.6 2055 4 BOVENDNX 359 36.6 2055 4 BOVENDNX 350 36.6 2055 4 BOVEN		40.4		1415	, –	MUSANXV	D634	23 Mouse mRNA
49.4 76.4 1480 10 MMU20396 77.7 74.1 1417 0 RATLC5 695 70.8 1028 10 ROC03716 727 74.1 1417 10 RATLC5 695 70.8 1028 10 ROC038 573 58.4 1229 5 CHKANCC2A 694.4 50.4 1279 5 BC043862 64.4 50.4 1477 5 BC043862 64.3 6 1477 5 CLANNEXM2 64.3 6 2055 4 BOVENDNX 65.4 1508 6 SOS3313. 65.4 1		49.4		1480		AX305384	AX305	384 Sequence
47.8 76.2 1522 10 BC003716 727 74.1 1417 10 RATLC5 695 70.8 1028 10 RF051895 573 58.4 1247 5 BC043882 94.4 50.4 1579 5 CHRANCC2A 35.4 4 90.1 49.1 5 BC043882 94.4 50.4 1579 5 D64134 48.3 48.3 6 A01773 77.8 48.3 48.0 6 A01773 77.8 48.0 6 A01773 77.8 48.3 6 A01773		49.4		1480		MMU29396	0293	96 Mus muscul
727 74.1 1417 b RAY101930 727 74.1 1417 b RAY101930 695 70.8 1028 10 AF051895 573 58.4 1229 5 CHKANCC2A 55.4 54.6 1477 5 BC043882 94.4 50.4 1579 5 D64134 483 49.2 483 6 A01773 73.8 48.1 483 6 A01774 84.4 39.2 1417 5 OLANNEXM2 359 36.6 2055 4 BOVENDNX 359 36.6 2055 4 BOVP3341 55.4 5 36.1 1074 5 AY178799 55.4 5 36.1 1074 5 AX178799 ARZ62471 981 bp DNA 11r ARZ62471 GI:28073915		47.8		1522		BC003716	BC00	3716 Mus musc
72 74.1 1417 10 AF051895 AF051895 573 58.4 1229 5 CHKANCC2A BA21730 K 573 58.4 1229 5 CHKANCC2A BC043882 BC0438 B1.4 49.1 483 6 A01773 A01772 DN R1.4 49.1 483 6 A01773 A01772 DN R2248 BC04384 BC04		727		1417		AX401930	AX401	930 Sequence
573 58.4 1229 5 CHKANCC2A M30971 CD 35.4 54.6 1477 5 BC0438B2 BC		177		141/		KATLC5	MZIV	30 Kat lipocor 1895 Pattus no
18.4 54.6 1477 5 BC043882 BC043882 BC043882 BC043882 BC043882 BC043882 BC043882 BC043882 BC043882 BC0438 BC043882 BC043882 BC043882 BC043882 BC043882 BC043882 BC043882 BC043882 BC043882 BC043832 BC04383 B		273		1229		CHKANCC2A	790FM	Chicken a
94.4 50.4 1579 5 D64134 D64134 Ne 81.4 49.1 48.3 6 A01772 A01772 DN 81.4 49.1 48.3 6 A01773 A01772 DN 81.4 49.1 48.3 6 A01774 A01773 DN 81.4 49.1 48.3 6 A01774 A01773 DN 81.5 48.3 48.0 6 A01774 A01773 DN 81.6 2055 4 BTCHR4 X13627 B0 81.6 2055 4 BTCHR4 X13627 B0 81.6 2055 4 BTCHR4 D78178 DN 81.8 5.4 1508 4 BOVP3341 DN 81.8 5.4 1508 4 BOVP3341 A178799 A1862471 GI:28073915	•	35.4		1477		BC043882	BC043	2 Xenopus
483 49.2 483 6 A01772 A01772 DN 481.4 48.1 483 6 A01774 A01774 DN 773.8 48.3 48.0 6 A01774 A01773 DN 84.4 39.2 1417 5 OLANNEXM2 X11253 O. 359 36.6 2055 4 BOUNENNX X13627 BO 359 36.6 1508 4 BOUP3341 DN 154.6 36.1 1074 5 AY178799 AY178799 ALIGNMENTS AR262471 981 bp DNA linear PAT AR262471 GI:28073915 Unknown.	~	94.4		1579		D64134	D6413	Newt
ARZ62471 48.3 6 A01774 A01774 DA1774 DA1774 DA1774 DA1774 DA17774 DA1777 DA177 D	•	48		483		A01772	A0177	DNA
## AR262471 ## AR2	4	. c		4 68 3		A01773	A0177	DNA
359 36.6 2055 4 BOVENDAX M22248 B0 359 36.6 2055 4 BTCBR4 X13627 B0 57.4 36.4 1074 5 AY178799 AY178799 54.6 36.1 1074 5 AY178799 AY178799 ALIGNMENTS AR262471 981 bp DNA linear PAT AR262471 G1:28073915 Unknown.	4 ~	. 48		1417		OLANNEXM2	V1125	4 DNA
359 36.6 2055 4 BTCHR4 X13627 B0 57.4 36.4 1508 4 BOVP3341 D78178 B0 57.4 36.1 1074 5 AY178799 AY178799 AX1626471 B0 B1 bp DNA linear PAT AR262471 981 bp DNA linear PAT AR262471 G1:28073915 Unknown.	,	35		2055		BOVENDNX	M2224	Bovine end
157.4 36.4 1508 4 BOVP3341 D78178 B0 154.6 36.1 1074 5 AY178799 AY178799 ALIGNMENTS ALIGNMENTS AR262471 981 bp DNA linear PAT AR262471 61:28073915 Unknown.		LO.		2055		BTCHR4	X1362	7 Bovine
154.6 36.1 1074 5 AY178799 ALIGNMENTS AR262471 Sequence 5 from patent US 6323313. AR262471.1 GI:28073915 Unknown.	m	57.	36.4	1508	•	-	D7817	8 Bovine mR
ALIGNMENTS AR262471 Sequence 5 from patent US 6323313. AR262471.1 GI:28073915 Unknown.	e G	54.	36.1	1074		CT.	AY178	799 Dani
AR262471 981 bp DNA linear PAT Sequence 5 from patent US 6323313. AR262471 AR262471.1 GI:28073915						ALIGNMENTS		·
AR262471 981 bp DNA linear PAT Sequence 5 from patent US 6323313. AR262471 GI:28073915 Unknown.	RESULT 1 AR262471	,						
AR262471 AR262471.1 GI:28073915 Unknown.	LOCUS				ate.	981 bp	linear	PAT 29-JAN-2003
Unknown.	ACCESSION				10735	2		
,	KEYWORDS	1101	230					
ORGANISM TOKOOWD	ORGANISM	Unki	DOWD.					

```
PAT 29-JAN-2003
                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99
                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99
                                                                                                                                                                                                   9
                                                                                                                                                                                                                င္တ
                                                                                                                                                                                                                             GGCTCAAGCCTGGAAGATGACGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                   181 TCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTA
                                                                                                                                                                                                                                                                                                                                                                    TATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATT
                                                                                                                                                                                                                                                                                                                                                 CAAGATGCTCAGGCTTTATTTCAGGCTGGAGACTTAAATGGGGGACAGATGAAAAAG
                                                                                                                                                                                                    1 AIGGCAIGTGGCTGCGGTCATAIGCACAGGTTCTCAGAGGCACTGIGACTGCCTT
                                                                                                                                                                                                         ACTEGAAAATTTGAAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCT
                                                                                                                                                                                                                                                                                                                     ACTGGAAAATTTGAAAAATTAGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITATCACCATCITIGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                            GTGGTTCTCCTTCAGGCTAACAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAA
                                                                                                                                                                                      Gaps
                                                                                                                                                                                      ö
                                                                                                                                                                         981;
                                                                                                                    sites
                                               linear
                                                                                                                                                                         Length
                                                                                                                                                                                      Indels
                                                                                                                    chelation
                                                                                                                                                                         9
                                                                                                                                                                                       ä
                                                                                                                                                                        Score 976.2; DB 6
Pred. No. 8.1e-247
0; Mismatches 3
                                                DNA
                                                                                                                                                    ı
                                                                                                    1 (bases 1 to 981)
Tait.J.F. and Brown,D.S.
Annexin derivative with endogenous (Patent: US 6323313-A 1 27-NOV-2001;
Location/Qualifiers
                                                                                                                                                    257
                                               981 bp
6323313.
                                                                                                                                      1. .981
/organism="unknown"
187 c 251 g
981
             981
       CTGCTCTCCGGAGAAGATGAC
CTGCTCTCCGGAGAAGATGAC
                                                     Sequence 1 from patent (AR262469
AR262469.1 GI:28073913
                                                                                                                                                                         99.58;
                                                                                                                                                                                       Conservative
                                                                                        Unknown.
Unclassified
                                                                                                                                                                               Local Similarity
nes 978; Conserv
                                                                                                                                                     4
                                               AR262469
                                                                                                                                                    286
                                                                                  Unknown
             196
                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
961
                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                        source
                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                               AR262469
LOCUS
                                                                                                                                                                                Best Loca
                                                      DEFINITION
                                                                                                                                                    BASE COUNT
                                                                                                            AUTHORS
TITLE
                                                                                                                          JOURNAL
                                                                                                      REFERENCE
                                                                                                                                  FEATURES
                                                                                                                                                           ORIGIN
           g
                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                    ó
                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                     ŏ
                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                              윱
                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
ò
                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                               ö
                                                                                      180
                                                                                                                                             240
                                                                                                                                                           240
                                                                                                                                                                                                                                                                                    540
                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                               9
                                                                                                                          360
                                                                                                                                                                                                                 360
                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                                                                                                                                                              780
                                                                                                                                                                                                                                                                                                                                                                                                                            840
                                                                                                                                                                                                                                                                                                                                                                                                                                        840
                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                      900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                960
                                                             09
                                                                          60
                                                                                                                                                                                                                                                                                                                                                                    TCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTA'
                                                                                                                                                                                                                                    GATGAGGAGAGCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATC
                                                                                                                                                                                                                               ATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATAT
                                                                                                                                                                                                                                                         GGCTCAAGCCTGGAAGATGACGTGGGGGGACACTTCAGGGTACTACCAGCGGATGTTG
                                                                                                                                                                                                                                                                                    GTGGTTCTCCTTCAGGCTAACAGAGCCCTGATGCTGGAATTGATGAAGCTCAAGTTGAA
                                                                                                                                                                                                                                                                                                              CAAGATGCTCAGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                           ACCCTCTATTATGCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCICTCITIATICCATGATTAAGGGAGATACAICTGGGGGACTATAAGAAAGCICTICTG
                                               Gaps
                                               ô
                                  981;
                                               Indels
                                  Length
                                Score 981; DB 6; I
Pred. No. 4.4e-248;
0; Mismatches 0;
             ı
             258
      /organism="unknown"
187 c 250 g
                                Match 100.0%;
Local Similarity 100.0%;
les 981; Conservative 0
             ស
             286
                                                                                                                                                                                                                                                                                                                                                                                                                                        781
                                                                                                    19
                                                                                                                               121
                                                                                                                                            181
                                                                                                                                                          181
                                                                                                                                                                         241
                                                                                                                                                                                     241
                                                                                                                                                                                                               301
                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                  121
                                                                                                                                                                                                  301
                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                  Query Match
                                                                                        5
                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                901
source
                                        Best Loca
Matches
             BASE COUNT
ORIGIN
                                                             à
                                                                          셤
                                                                                                   8
                                                                                                                                                       8
                                                                                                                                                                                 g
                                                                                                                                                                                               ò
                                                                                                                                                                                                             a
                                                                                                                                                                                                                         8 6
                                                                                                                                                                                                                                                       9 g
                                                                                                                                                                                                                                                                                             D
                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                     g
                                                                                       ö
                                                                                                                  ò
                                                                                                                               셤
                                                                                                                                           à
                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                     å
                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                            쉼
                                                                                                                                                                                                                                                                                                                                                                                                                           ç
                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
```

ö

	Qy	QY 601 TTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTAC 660 DD 601 TTTATCACCATCTTTGGAACAGGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTAC 660 QY 661 ATGACTATATCAGGATTTCAAATTGAGGAAACCATTGACGGAGACTTCTGGCAATTTA 720 DD 661 ATGACTATATCAGGATTTCAAATTGAGGAACCATTGACGGGAGACTTCTGGCAATTTA 720	Qy 721 GAGCAACTACTCCTTGCTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGG 780 LIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	RESULT 4 A07367 LOCUS DOCUS DOCUS DEFINITION M. musculus VAC-alpha CDNA. ACCESSION ACC
AATTTA AATTTA SCAGAG GCAGAG		QY 901 ACCTCTTTATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTG 960 Db 901 ACCTCTTTTATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTG 960 CQY 961 CTGCTCTCTTTATTCCATGATAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTG 960 QY 961 CTGCTCTCCGGAGAAAATGAC 981 Db 961 CTGCTCCCGGAGAAGATGAC 981	RESULT 3	Query Match 99.5%; Score 976.2; DB 6; Length 981; Best Local Similarity 99.7%; Pred. No. 8.1e-247; Matches 978; O; Gaps 0; Matches 978; Conservative 0; Mismatches 3; Indels 0; Gaps 0; QY 1 ATGGCATGTGGCTGGTGATGTGAGGTTCTCAGAGGCACTGTGACTTCCCT 60 GATTGATGAGGGCTGATGGAAACTCTTCGGAGGCACTGTGACTTCCCT 60 GY 61 GGATTTGATGAGGCTGATGAGAACTCTTCGGAGGCACTGTGACACTCCCT 60 GY 61 GGATTGATGAGGCGGTGATGAAACTCTTCGGAGGCACTGGACACTGCACTGCACACTCCCT 120 GY 61 GGATTGATGAGGCGGCTGATGAAACTCTTCGGAGGCACTGGACACTGGCACA 120 Db 121 GATGAGGAGACTCTTGATGACATCCCGAAGTATGAAGGCACGGCACAGGAATC 180 Db 121 GATGAGGAGACTCTTTTGACATCCCGAAGTAATGCTCAGGAATC 180 QY 181 TCTGCAGCTTTTAAGACTCTGTTTGACATCTCTGGATGACCTCAGGAATC 100 QY 181 TCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTGGATGACTTATGATGCT 300 QY 241 ACTGGAAATTTTAAAATTAATTGTGGCTCTGATGAAACCTCTCGGCTTTATGAACTC 300 QY 241 ACTGGAAATTTTAAAAATTAATTGTGGCTCTGATGAAACCTCTCGGCTTTATGAAACTCTTATGAAAATTATGAAAACTCTGAAAACAAATGAAAACAAAAAAAA

```
complete cds.
                                                                                                                                                                                                                                                                                                                                                                        Strausberg, R.
                                                                              Homo saplens
                                                                                                                      Homo sapiens
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                        2477932
                                                                     BC004993
                                                                                                                                                                                                                                                                                                                                              22388257
         981 C 981
                          994
                          994 C
                                                                             DEFINITION
                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                              ACCESSION
                                                   RESULT 5
BC004993
                                                                                                      VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                              MEDLINE
                                                                                                                                                                                                                                                                                                                                                       PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                        REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                     TITLE
                          셤
          ö
RDPDAGIDEAQVEQDAQALFQAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMISG
FQDETIDIRETSGNLEQLLLAVVKSIRSIPAYLAETLYYAWKGAGTDDHTLIRVMVSR
SEIDLFWIRKEFRKRFRKFAKFAYSAIKGDTSGDYKKALLLLCGEDD*
291 c 327 g 425 t
                                                                    ö
                                                                                                                       140
                                                                                                                               200
                                                                                                                                                                                                                       AATTGTGGCTCTGATGAAACCTCTCGGCTTTATGATGCTTATGAACTGAAACTGAAACTT 320
                                                                                                                                                                                                                                                         440
                                                                                                                                                                                                                                                                                                                                                                                               620
                                                                                                                                                                                                                                                                                                                                                                                                               633
                                                                                                                                                                                                                                                                                                                                                                                                                              753
                                                                                                                                                                                       CGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAA 500
                                                                                                                                                                                                                                                                                                                                      CAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATT 560
                                                                                                                                                                                                                                                                                                                                                                               573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGGCCCTCTATTATGCTATGAA 800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGA 860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGAT 920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGA 980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               80
                                                                                                    93
                                                                                             TGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGAC
                                                                                                                                                      TCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCT
                                                                                                                                                                TATGCCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGGGGGCTGA
                                                                                                                                                                                                                                                                                                                                                                     AGAACTGAGAGCCATCAAACAAGTTTATGAAGAATATGGCTCAAGCCTGGAAGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGT
                                                                    Gaps
                                                                    ö
                                                   Length 1466;
                                                                    Indels
                                                 Score 957.8; DB 6;
Pred. No. 5.9e-242;
0; Mismatches 2;
                                                   97.6%;
                                                          al Similarity 99.8
959; Conservative
                                                  Query Match
Best Local S
Matches 959
                                                                                                                                                                                                                                        274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    874
                                                                                                                                                       141
                                                                                                                                                                                                       21.4
                                                                                                                                                                                                                                                                                           381
                                                                                                                                                                                                                                                                                                            394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      934
                                                                                    7
                                                                                                                                                                                       201
                                                                                                                                                                                                                        261
                                                                                                                                                                                                                                                         321
                                                                                                                                                                                                                                                                                                                             441
                                                                                                                                                                                                                                                                                                                                            454
                                                                                                                                                                                                                                                                                                                                                             501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      921
                        BASE COUNT
ORIGIN
                                                                                                    g
                                                                                                                                                                                                    g
                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                         qq
                                                                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                          a à
                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                    à
                                                                                                                                  g
                                                                                                                                                     ð
                                                                                                                                                                  8
                                                                                                                                                                                  ŏ
                                                                                                                                                                                                                  ď
                                                                                                                                                                                                                                                         ŏ
                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

```
DENNITURE ADDRESSION BOOM 9433

ACCESSION MONOHARD AND ALL AS A MAY (CDNA clone MCC:4402 IMAGE:2906015), COMPLETE OR SOURCE OR
```

ហ

```
Mammalia; Eutheria; Primates; Catarrini; Hominidae; Homo.

Estausbarga, L., Feingold, E. A., Grouse, L. H., Derge, J. G.

Strausbarg, R. L., Feingold, E. A., Grouse, L. H., Derge, J. G.

Altschul, S. F., Zeeberg, B., Buetow, K. H., Schaefer, C. F., Bhat, N. K.,

Hopkins, R. F., Jordan, H., Moore, T., Max, S. I., Wang, J., Haiseh, F.,

Diatchenko, L., Marusina, K., Farmer, A. A., Rubin, G. M., Hong, L.,

Stapleton, M., Soares, M. B., Bonaldo, M. F., Casavant, T. L.,

Stapleton, M., Soares, M. B., Bonaldo, M. F., Casavant, T. L.,

Carninci, P., Prange, C., Raha, S. S., Loquellano, N. A., Peters, G. J.,

Morlay, K. C., Malek, J. A., Gunarathe, P. H., Richards, S.,

Worlay, K. C., Hale, S., Garcia, A. M., Gay, L. J., Hulyk, S. W.,

Villalon, D. K., Muzny, D. M., Sodergren, E. J., Lu, X., Gibbs, R. A.,

Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,

Butterfield, Y. S., Rezywinski, M., Touchman, J. W., Green, E. D.,

Butterfield, Y. S., Krzywinski, M., Smailus, D. E.,

Schnerch, A., Schein, J. E., Jones, S. J. and Marra, M. A.

Generation and initial analysis of more than 15,000 full-length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BC012804 1539 bp mRNA linear PRI 06-JUN-2003
Homo sapiens annexin A5, mRNA (cDNA clone MGC:2795 IMAGE:2961097),
complete cds.
BC012804
BC012804.1 GI:15215411
                                                                                                                                                                                                                                                                                 1022
                                                                                                                                                                                                                                                                                                             740
                                                                                                                                                    902
                                                                                                                                                                                    960
                                                                                                                                                                                                                  962
                       782
                                                                                      842
                                                                                                                    800
                                                                                                                                                                                                                                                 TCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGAT 920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (15-AUG-2001) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                    TGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAA
                                                                                                                                        GGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGA
                                                        AATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              human and mouse cDNA sequences
Proc. Natl. Acad: Sci. U.S.A. 99 (26), 16899-16903 (2002)
22388257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NIH-MGC Project URL: http://mgc.nci.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 (bases 1 to 1539)
Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                C 1083
                                                                                                                                                                                                                                                                                                                                                                                981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo
                                                                                                                                                                                                                                                                                                                                                                                U
                       723
                                                                                                                                                                                                                                                                                 693
                                                                                      783
                                                                                                                    741
                                                                                                                                                                                                                  903
                                                                                                                                                                                                                                                 861
                                                       681
                                                                                                                                                                                  801
                                                                                                                                                                                                                                                                                                                                                                                  981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 6
BC012804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                     q
                                                       δý
                                                                                 යි. දි
                                                                                                                                                 음
                                                                                                                                                                                  Qγ
                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                 οy
                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                Qγ
                                                                                                                                                                                                                                            /product="annexin 5"
/protein_id="AAB04993.1"
/protein_id="AAB04993.1"
/db_xref="Cot:13436443"
/db_xref="Cot:13436443"
/db_xref="Cot:1308"
/translation="MAQVLRGTVTDEPGEDERADAETLRKAMKGLGTDEESILFLLTS
RSNAQRGISAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKAKG
RSNAQRGISAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKGA
RSDPAGIDEAQVEGDAQALFQAGELKWGTDEEKFTIFGTRSVSHLRKVFDYYMTISG
FQIESTIDREFSGNAMEQLLLAVVKSIRSIPATLATVAMKGAGTDDHTLIRVMYSR
SEIDLENIRKEFRKMFATSLYSMIKGDTSGDYKRALLLLCGEDD"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGAACTGAGAGCCATCAAACAAGTTTATGAAGAAATATGGCTCAAGCCTGGAAGATGA 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGA 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81 TGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGCACCTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATTGTGGCTCTGAAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TATGGCACACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     183 TGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    141 TCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1536;
/organism="Homo sapiens"
/mol_type="mRNA"
/do_xref="taxon:9606"
/clone="MGC:4402 IMAGE:2906015"
/tissue_type="Stin, melanotic melanoma."
/lab_host="DH10B-R"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                         97.6%; Score 957.8; DB 9;
99.8%; Pred. No. 5.9e-242;
14ve 0; Mismatches 2;
                                                                                                                                                                     ENX2, PP4"
                                                                                                                                                                                                                                                                                                                                                                                                              434 t
                                                                                                                                1. 1536
/gene="ANXA5"
/note="synonyms: ANX5, E:
/db_xref="LocusID:308"
/db_xref="MIM:131230"
                                                                                                                    /note-"Vector: pOTB7"
                                                                                                                                                                                                                                                                                                                                                                                                              352 q
                                                                                                                                                                                                                                  /codon_start*1
                                                                                                                                                                                                                  .1086
                                                                                                                                                                                                                                                                                                                                                                                                              320 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
es 959; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             321
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                            COUNT
                                                                                                                                                                                                                  CDS
                                                                                                                                                                                                                                                                                                                                                                                                           BASE CC
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ç
```

Fri

```
Tanmatis' Euclisians' Filmares' Cacaffilli; Nonintage; Namo.

Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Altschul, S.F., Zeeberg, B., Buerow, K.H., Schaefer, C.F., Bhat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S. I., Wang, J., Hsieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Schetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S.,
Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J.,
Abramson, R.D., Mulahy, S.J.A., Gunaratne, P.H., Richards, S.,
Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalon, D.K., Wuzny, D.M., Sodergrein, E.J., Lu, X., Gibbs, R.A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S.,
Sanchez, A., Whiting, M., Madan, A., Youchan, J.W., Green, E.D.,
Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         bCU12822 1539 bp mRNA linear PRI 06-JUN-2003
Homo sapiens annexin A5, mRNA (cDNA clone MGC:4465 IMAGE:2961097),
complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     920
                       545
                                                                                                                                     560
                                                                                                                                                                         665
                                                                                                                                                                                                               620
                                                                                                                                                                                                                                                                                           680
                                                                                                                                                                                                                                                                                                                                                                     740
                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTGAAATCTATTGGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGGTATGA 800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           921 TAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGA 980
                                                                                                                                                                                                                                                     725
                                                                                                                                                                                                                                                                                                                             785
                                                                                                                                                                                                                                                                                                                                                                                                         845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                 546 CGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAA
                                                                                                                                                           CGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAA
                                                                                                                                       CAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGTTATT
                                                                                                                                                                                                                                                                                           ACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCA
                                                                                                                                                                                                                                                                                                                                                                     681 AATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGT
                                                                                                                                                                                                                                                                                                                                                                                         846 TGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCCATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BC012822.1 GI:15215458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         c 1086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     981 C 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo
                                                           441
                                                                                                                                                                                                                 561
                                                                                                                                                                                                                                                                                                                                                                                                         786
                                                                                                                                                                                                                                                                                                                                                                                                                                               741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1086
                                                                                                                                       201
                                                                                                                                                                                                                                                     999
                                                                                                                                                                                                                                                                                           621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BC012822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT
                                                         ò
                                                                                             g
                                                                                                                                     ò
                                                                                                                                                                     q
                                                                                                                                                                                                               ŏ
                                                                                                                                                                                                                                                     요
                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                             ŏ
                                                                                                                                                                                                                                                                                         ç
                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                           Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortlum/Linn at: http://image.llnl.gov Serles: IRAL Plate: 2 Row: b Column: 4.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /traislation-manale
RSNAORGEISAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKG
AGTNEKVLTEIIASRRPEELAAIKOVYEEFYGSSLEDDVVGOTSGYYORMLVVLLQAN
RDPDAGIDEAQVEQDAQALFQAGELKWGTDEERKTITFGTRSVSHLRKVFDKYTISG
FQIEFTIDRFTSGNIEGLLLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMYSR
SEIDLFNIRKEFRKNFATSLYSMIKGDTSGDYKKALLLLGGEDD"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGAC 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCT 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTT 425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        381 AGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGA 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             80
                                                                                                                                                         Anuradha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AATTGTGGCTCTGATGAAACCCTCTCGCTTTATGATGCTTATGAACATGACATGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21 TATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGGGGGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
               Email: cgapbs-rémail.nih.gov
Tissue Procurement: ATCC
CDNA Library Preparation: Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Institute for Systems Biology
http://www.systemsbiology.org
contact: amadan@systemsbiology.org
Anup Madan, Jessica Fahey, Erin Helton, Mark Ketteman, Anurad
Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1539;
                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/db_xref="taxon:9606"
/clone="MGC:2795 IMAGE:2961097"
/tissue_type="Muscle, rhabdomyosarcoma"
/clone_lib="NIH,MGC_17"
/lab_host="DHIOB-R"
/note="Vector: pOTB7"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PP4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97.6%; Score 957.8; DB 9;
99.8%; Pred. No. 5.9e-242;
1ve 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note="synonyms: ANX5, ENX2, /db_xref="LocusID:308" | 127. 1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /product-"annexin 5"
/protein_id-"AAH12804.1"
/db_xref-"GI:15215412"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /db_xref-"LocusID: 308"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       355 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       320 €
 Contact: MGC help
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best_Local Similarity 99.8
Matches 959; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDS
                                                                                                                                                                                                                                                                     FEATURES
COMMENT
```

ð 셤 ç 셤 ò 셤 q

ò

g

ò

8

ò

ð

```
Human placenta anticoagulant protein PP4 mRNA, complete cds. M19384 J03284 J03284 J03284 J03284 H1995 M19384 L GI:189614 anticoagulant protein; thromboplastin inhibitor. Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  365
                                                                                             320
                                                                                                                        425
                                                                                                                                                      380
                                                                                                                                                                                     485
                                                                                                                                                                                                                   440
                                                                                                                                                                                                                                                  545
                                                                                                                                                                                                                                                                                500
                                                                                                                                                                                                                                                                                                             605
                                                                                                                                                                                                                                                                                                                                          560
                                                                                                                                                                                                                                                                                                                                                                         665
                                                                                                                                                                                                                                                                                                                                                                                                       620
                                                                                                                                                                                                                                                                                                                                                                                                                                    725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   965
                                 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi, Mammalia; Butheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 1582)
Grundmann, U., Abel, K.J., Bohn, H., Lobermann, H., Lottspeich, F. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCT
                                                                                                                                                                                                                   AGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGA
                                                                                                                                                                                                                                   441 CGFGGTGGGGGACACTTCAGGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAA
                                                                                                                                                                                                                                                                                                                                                              TCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      801 GGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 921 TAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGA
                                   GAAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGA
                                                                                                                                                                                                                                                                                                                                            501 CAGAGACCCTGGAGTTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                681 AATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kupper, H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            981 C 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          U
                                                                                                                                                                                                                                                  486
                                                                                                                                                                                                                                                                                                                                                                                                         561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         741
                                                                908
    246
                                 201
                                                                                                                                                          321
                                                                                                                                                                                                                   381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                     g
                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                ŏ
                                                             g
                                                                                             ŏ
                                                                                                                        g
                                                                                                                                                      õ
                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                         οŽ
                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /translation="MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESIITLLTS
'RSNAQRQEISAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKG
ATNEKVLTEIIASRTPEELRAIKOVYEEEYGSSLEDDVVGTYGYYORMLVVLLQAN
RDPDGIDEAQVEQDAQALFQAGELKWGTDEEKFTITFGTYSYSHLRKVFDKYMTISG
FOIETIDRETSGNIEGLLIAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSR
SEIDLFNIRKEFRKNFATSLYSMIKGDTSGDYKKALLLLCGEDD"

320 c 355 g 432 t
                                                                                                                                                                                                                                                                                                                                                                                                  Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at: http://image.llnl.gov
Series: IRAL Plate: 10 Row: k Column: 21.
Location/Qualifiers
1. 1539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   80
Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E., Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
                                                                                                                                      Direct Submission
Submitted (15-AUG-2001) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81 TGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             141 TCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                            CDNA Library Preparation: Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Institute for Systems Biology
http://www.systemsbiology.org
contact: amadanesystemsbiology.org
Anup Madan, Jessica Fahey, Erin Helton, Mark Ketteman, Anurac
Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1539;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="mRNA"
/db_ref="taxon:9666"
/db_ref="taxon:9666"
/clone="MGC:1465 IMAGE:2961097"
/tissue_type="Muscle, rhabdomyosarcoma"
/clone_lib="MILMGC_17"
/lab_host="PH10B-R"
/note="Vector: pOTB?"
                                                                                                                                                                                                                NIH-MGC Project URL: http://mgc.nci.nih.gov
Conteact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 957.8; DB 9;
Pred. No. 5.9e-242;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /codon_start=1
/product="annexin 5"
/protein_id="AAH12822.1"
/db_xref="GI:15215459"
/db_xref="LocusID:308"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /gene="ANXAS"
/note="synonyms: ANX5, E.
/db_xref="LocusID:308"
/db_xref="MIM:131230"
127. 1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97.6%;
                                                                                                         (bases 1 to 1539)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    al Similarity 99.8
959; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .1539
                                                                                                                        Strausberg, R.
                                                                                             12477932
                                                                             22388257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BASE COUNT
ORIGIN
                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                           MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                              JOURNAL
                                                                                                                                                                                                                   REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                TITLE
```

õ 셤 ö 셤

```
/codon_start=1
/transl_table=11
/product="vascular anticosgulating protein"
/protein_id="CAA00193.1"
/db_xref="G1:410788"
/db_xref="G1:410788"
/translation="MAQVLRCTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTS
/kranslation="MAQVLRCTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTS
RSNAQRQEISAAFKTLFGRDLLDDLKSELTGKFFEKLIVALMFSRLYDSYELKHAKG
AGTNEKVLTBIASKTPEELABIKOVYEEBYGSSLEDDVVGDTSGYYORMLVVLLQAN
RDPBAGIDEAQVEGDAALFQAGELKWGTDEEKFTTIFGTRSYSHLRKVFDKYMTISG
FQ1ERTIDETSGRSGNLEQLLLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSR
SEIDLFNIRKEFRKNFATSLYSMIKGDTSGDYKKALLLLGGEDD"
35 a 181 c 243 g 254 t
                                                                                                                                                                                                                                                                                                                                                                    1049
                                                                                                                                                                                                                                                                                                                                                                                                  PAT 01-SEP-1993
 689
                                                          749
                                                                                         680
                                                                                                                     809
                                                                                                                                                   740
                                                                                                                                                                                  698
                                                                                                                                                                                                              800
                                                                                                                                                                                                                                            929
                                                                                                                                                                                                                                                                           960
                                                                                                                                                                                                                                                                                                       686
                                                                                                                                                                                                                                                                                                                                     920
                            741 TGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAA
                                                                                                                                                                                                                                                                                          630 CAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATT
                                                                                                                                                                                                                                 861 TCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGAT
                                                                                                                                                                     621 ACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCA
                                                                                                                                                     AATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WHICH CODE FOR THEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A01769 963 bp DNA linear PAT DNA sequence (gaa) for vascular anticoagulating protein A01769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 963;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 956.8; DB 6;
Pred. No. 1.1e-241;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   construct,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VASCULAR ANTICOAGULANT PROTEINS, DN/
MANUFACTURE AND APPLICATION THEREOF
PATENT: WO 8807576-A 1 06-OCT-1988;
LOCALION/QUALIFIERS
1. 963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="synthetic cc/mol_type="genomic DNA"/db_xref="taxon:32630"
1. .963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97.5%;
ilarity 99.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               synthetic construct
synthetic construct
artificial sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (bases 1 to 963)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GI:410787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A01769.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1110 ¢ 1110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                              981 C 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Sim
Matches 958;
                                                                                                                                                       681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 9
A01769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Locus
                                                                                                                                                                                  g
                                                                                                                                                                                                                                           Db
                                                                                                                                                                                                                                                                                                         Q.
                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                               ð
                                                          a
                                                                                          õ
                                                                                                                    D
                                                                                                                                                     ŏ
                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                   õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                  AGTNEKÜLTEI IASKTPEELRAIKÕYYEEEYGSSLEDDVYGDTSGYYORMLVVLLOAN
PODAGIDERAQVEODAQALEOAGELKAYOTBEEKTEITIFGTSYSHLRKYFDKYNTISG
FOIEFTIDRETSGHEGOLLAAVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSR
SEIDLFNIRKEFRKNPATSLYSMIKGDTSGDYKKALĻLLCGEDD
                                                                                                                                                                                                                                                                                                                                                       /translation-"MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTS
RSNAQRQEISAAFKTLFGRDLLDDLKSELFGKFEKLIVALMKPSRLYDAYELKHALKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein (PP4): homology with the lipocortin family Proc. Natl. Acad. Sci. U.S.A. 85 (11), 3708-3712 (1988) 89234495 2967495 Original source text: Homo sapiens (clone: PP4-[14,20,26,48].) placente oDNA to mRNA. Draft entry and computer readable sequence for [1] kindly provided by U.Grundman, 19-APR-1988.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGA 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
   Characterization of cDNA encoding human placental anticoagulant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    270 TCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCATTTAAGACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAGGGGGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21 TATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGGGGGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 1582;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="g in PP4-[14,26,48]; c in PP4-20"
                                                                                                                                                                                                                                                                                                         /product="anticoagulant protein 4"
/protein_id="AAB59545.1"
/db_xref="G1:189615"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97.6%; Score 957.8; DB 9;
99.8%; Pred. No. 5.9e-242;
1ve 0; Mismatches 2;
                                                                                                                                                              /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="pp4-[14,20,26,48]."
/tissue_type="placenta"
/l. 1582
/product="pp4 mRNA"
151. 1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              449 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           33 a 336 c 364 g upstream of Smal site.
                                                                                                                                                                                                                                                                           151. .1113
/codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /replace="c"
336 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      959; Conservative
                                                                                                                                                       1. .1582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            570
                                                                                                                                                                                                                                                                                                                                                                                                                                                  variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local
Matches 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BASE COUNT
ORIGIN
                                            MEDLINE
PUBMED
                                                                                                                                                                                                                                                mRNA
                               JOURNAL
                                                                                                                                        FEATURES
 TITLE
                                                                            COMMENT
```

ð ద õ 셤 à g ò 음 δ a ð 임 ö g ò 셤 ò

ö

9 g

6 6 6 6 6 6

1	Unknown. Unknown. Unclassified. 1 (bases 1 to 1432) Wallbar, B.P., Pephinsky, R.B. and Browning, J.L. Wallbar, B.P., Pephinsky, R.B. and Browning, J.L. DNA sequences, recombinant DNA molecules and processes for producing lipocortins III, IV, V & VI Patent: EP 033036-A2 21 30 AUG-1989; Location/Qualifiers Ce /Organism-"unknown" T 420 a 276 c 323 g 413 t	Query Match Query Match Query Match Best Local Similarity 99.8%; Score 956.8; DB 6; Length 1432; Best Local Similarity 99.8%; Pred. No. 1.1e-241; Matches 958; Conservative 0; Mismatches 2; Indels 0; Gap Action 22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTGATTGAT		121 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAATCTCTGCAGCTTTTAAGACTC 202 TTTGGCAGGGATCTTCTGGATGACCTCAAATCAGAACTAACT	241 #THINININININININININININININININININININ		502 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTAT 111111111111111111111111111111111111	
	ATGGCACAGGTTCTCACAGGCACTGTGACTTCCCTGGATTTGATGAGGGGCTGAT 81	######################################	AAGGAQCTGGAACAAATGAAAAAGTACTGACAGAATTATTGCTTCAAGGACACCTGAA 381	GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC 501 [CAGGCTGGGGAACTTAAATGGGGGACAGATGAAAAAGTTTATCACCATCTTTGGAACA 621 [1] [1] [1] [1] [1] [1] [1] [1] [1] [1]	CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA 660 ATTGAGGAAACCATTGACGGGAACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT 741	GGAGCTGGACAGTGATACCTCCTTCCAGAGACCCTCTATTATGCTATGAGAGAGA	CTGTTPAACATCAGGGGGTTTAGGAAGAATTTGCCACCTCTTTATTCCATGATT 921 [11]

oy do

QQ ò g ç

q ò g S do ya

ç q

6 B 셤 ò g

ó 120 180 240 420 CGGATGTTGGTGGTTCTCCTTCAGGCTAAC 501 141 261 ACAGAAATTATTGCTTCAAGGACACCTGAA 360 441 540 621 099 720 201 381 561 9 681 741 801 780 9 81 GAAGAATATGGCTCAAGCCTGGAAGATGAC GAAGAAAGTTTATCACCATCTTTGGAACA GACTTCCCTGGATTTGATGAGCGGGCTGAT GAAGAATATGGCTCAAGCCTGGAAGATGAC GAAGAAAGTTTATCACCATCTTTGGAACA GACAAGTACATGACTATATCAGGATTTCAA GACAAGTACATGACTATATCAGGATTTCAA TTGGGCACAGATGAGGAGGAGCATCCTGACT ACAGAAATTATTGCTTCAAGGACACCTGAA CAAGTTGAACAAGATGCTCAGGCTTTATTT 742 GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGCCCTCTATTATGCTATGAAG GACTTCCCTGGATTTGATGAGCGGGCTGAT Gaps , 0 8; DB 6; Length 1432; 1.1e-241; hes 2; Indels 0; 13 721 803 781 οχ 90 90 90

PAT 02-DEC-1994

linear

1432 bp Sequence 21 from Patent EP 0330396. 107345. 107345.1 GI:590053

RESULT 10 107345 LOCUS DEFINITION ACCESSION VERSION KEYWORDS

g . 5 g

ç

```
02-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 1454)
Fujikawa,K., Irani,M.H. and Carter,B.L.A.
HUMAN PROTEINS HAVING ANTICOAGULANT AND ANTI-INFLAMMATORY ACTIVITY
Patent: WO 8805659-A 3 11-AUG-1988;
Location/Qualifiers
1. .1454
                                                                                        501
                                                                                                                                                                                      552
                                                                                                                                                                                                                                 612
                                                                                                                                                                                                                                                                            672
                                                                                                                                                                                                                                                                                                                       732
                                                                                                                                                                                                                                                                                                                                                                                                              852
                                                                                                                                                                                                                                                                                                                                                                                                                                                        912
                                                     372
                                                                           441
                                                                                                                                            492
                                                                                                                                                                  561
                                                                                                                                                                                                            621
                                                                                                                                                                                                                                                        681
                                                                                                                                                                                                                                                                                                   741
                                                                                                                                                                                                                                                                                                                                              801
                                                                                                                                                                                                                                                                                                                                                                   792
                                                                                                                                                                                                                                                                                                                                                                                        861
                                                                                                                                                                                                                                                                                                                                                                                                                                   921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  972
                                 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                                                                                              GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCCTTCAGGCTAAC
                                                                                                                                    GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                          CTGTTTAACATCAGGAGGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                              GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                  502 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                              CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                     ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1454;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 956.8; DB 6;
Pred. No. 1.1e-241;
); Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         108832 1454 bp
Sequence 3 from Patent WO 8805659,
108832,1 GI:588459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="unknown"
279 c 325 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ouery Match
Best Local Similarity 99.8%;
Matches 958; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown
                                                                                                                        442
                                                                                                                                                                                        493
                                                                                                                                                                                                              562
                                                                                                                                                                                                                                  553
                                                                                                                                                                                                                                                                                                                                              742
                                                                                                                                                                                                                                                                                                                                                                                          802
                                                                                                                                                                                                                                                                                                                                                                                                                                    862
                                                                                                                                                                                                                                                                                                                                                                                                                                                         853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22
            253
                                                                                                  373
                                                                                                                                             433
                                                                                                                                                                                                                                                                                                     682
                                                                                                                                                                                                                                                                                                                                                                    733
                                                                                                                                                                                                                                                                                                                                                                                                              793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 12
I08832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                               õ
                                                 g y
                                                                                            g
                                                                                                                        õ
                                                                                                                                         g
                                                                                                                                                             ò
                                                                                                                                                                                    g
                                                                                                                                                                                                            ò
                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                                                                                    ç
                                                                                                                  1444 bp mRNA linear PRI 27-APR-1993
Human placental anticoagulant protein (PAP) mRNA, complete cds.
M18366.1 GI:179131
                                                                                                                                                                                                                                                                                                                                                                                                                                                      /traislation-*MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTS
RSNAQRQEISAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKG
AGTNERVLTEIIASRPPEELAAIKOYYEEFYGSEDDVYOFDSGYYOFNLVQAN
RDPDAGIDEOTSGYYOPALAYOYYEEFKFILDFOYSGYYOFNLYYFDKYTISG
FQIEDTIDRETSGHUDLAVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMYSR
SEIDLFNIRKEFRKNFATSLYSMIKGDTSGDYKKALLLLCGEDD**
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             261
            921
                                                      981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG 321
                                                                                                                                                                                                Homo saplens
Eukaryota, Metazoa, Chordata, Cranlata, Vertebrata, Euteleostomi,
Mammalia, Eutheria; Primates, Catarrhini; Hominidae, Homo.
1 (bases 1 to 1444)
Funakoshi, T., Hendrickson, L.E., McMullen, B.A. and Fujikawa, K.
Primary structure of human placental anticoagulant protein
Biochemistry 26 (25), 8087-8092 (1987)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     put.); putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                       Gaps
                                                                                                                                                                                                                                                                                                     clones
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1444;
                                                                                                                                                                                                                                                                                                      mRNA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                end
                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                               (2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9;
                                                                                                                                                                                                                                                                                                Original source text: Human placenta, cDNA lambda-HPAP[1.0,1.1,1.6].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 956.8; DB 9;
Pred. No. 1.1e-241;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                 13. .975
/note="anticoagulant precursor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ų
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              418
                                                                                                                                                                                                                                                                                                                                                                                                                                  /protein_id="AAA35570.1"
/db_xref="G1:179132"

    1444
/organism="Homo sapiens"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /product-"anticoagulant"
                                                                                                                                                                                                                                                                                                                                                                    ="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421 a 280 c 325 g
bp upstream of PstI site.
                                                                                                                                                                                                                                                                                                                                                                     <1. .1444
/product="ATC mRNA"
13. .975</pre>
                                                                                                                                                                                                                                                                                                                                                          /mol_type="mRNA"
/db_xref="taxon:9
                                                                                                                                                                                                                                                                                                                                                                                                                        /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 99.8%;
Matches 958; Conservative
                                                                                                                                                                            anticoagulant.
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                   Original
                                                                                                                                                                                                                                                                                        2964863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mat_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      262
                                841
                                                      922
                                                                           901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                193
                                                                                                                                                                                                                                                                                                                                    source
                                                                                                          HUMATC
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNT
                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
JOURNAL
MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                mRNA
                                                                                                                                                                                                                                                                                                                                                                                                   cos
                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BASE CO
                                                                                                                                                                                                                                                                                                   COMMENT
```

ò ద ò ద ò 셤 ò g

ö

```
/product="annexin A5"
/product="annexin A5"
/protein_id="AAH01429,1"
/protein_id="aAH01429,1"
/d_xref="a1:12655149"
/translation="MAQVLRGTVTPFPGFDERADAETLRKAMKGLGTDEESILTLLTS
RSNAQROEISAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKFPSRLYDAYELKHALKG
AGTNEKVLTEITASRRPFEELRAIKQYVEEEVGSELBDDVGOTTSGYYORMLVVLLQAN
RDPDAGIDEAQVEQDAQALFQAGEGEKWGTDEEKFITFGTRSVSHLRKVFDYYMTISG
FQIEFTIDREFGSHLAGOLLAVYKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMYSS
SEIDLENIRKBEFRKNIATSLYSMIKGDTSGDYKKALLLLCGEDD"
                                                                                                                                                                                                                                                                              Contact:
Shevchenko,Y., Wetherby,K.D., Beckstrom-Sternberg,S.M.,
Benjamin,B., Blakesley,R.W., Bouffard,G.G., Brinkley,C., Brooks,S.,
Dietrich,N.L., Guan,X., Gupta,J., Ho,S.-L., Karlins,E., Legaspi,R.,
Lim,M., Maduro,O.L., Maslello,C., Mastrian,S.D., McCloskey,J.C.,
McDowell,J., Pearson,R., Snyder,B., Stantripop,S., Thomas,P.J.,
Tiongson,E.B., Touchman,J.W., Tsurgeon,C., Vogt,J.L., Walker,M.A.,
                                                                                                                                                                                                                                                                                                                                                                                                       Clone distribution: MGC clone distribution information can be fou through the I.M.A.G.E. Consortium/LiNL at: http://image.llnl.gov Series: IRAL Plate: 4 Row: o Column: 24
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 219480.
                 Euteleostomi;
                                                                     Direct Submission
Submitted (12-DEC-2000) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: MGC help desk
Email: cgapbs-rémail.nih.gov
Tissue Procurement: DCTD/DTP
CDNA Library Preparation: Wubin Laboratory
DNA Sequencing by: The I.M.A.G.E. Consortium (LLNL)
Sequencing Center (NISC),
               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Eutele
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo,
1 (bases 1 to 1538)
Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1538;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone="MGC:2261 IMAGE:3140878"
//tissue_type="Ovary, adenocarcinoma"
//clone_lib="NIH_MGC_9"
/lab_host="DH108-R"
                                                                                                                                         NIH-MGC Project URL: http://mgc.nci.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 956.8; DB 9;
Pred. No. 1.1e-241;
); Mismatches 2;
                                                                                                                                                                                                                                                                  http://www.nisc.nih.gov/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="LocusID:308"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="Vector: poTB7"
80. .1042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         342 g
                                                                                                                                                                                                                                                                                                                                                                               Zhang, L.-H. and Green, E.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /codon_start=1
                                                                                                                                                                                                                                                    Gaithersburg, Maryland;
Web site: http://
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .1042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        304 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
  sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           958;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S:
Matches 958,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNT
                                         REFERENCE
AUTHORS
                                                                   TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                         REMARK
                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BASE CO
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          οχ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1538 bp mRNA linear PRI 12-JUL-2001 Homo sapiens, annexin A5, clone MGC:2261 IMAGE:3140878, mRNA, COMPLETE cds.
BC001429
BC001429.1 GI:12655148
                                                                   132
                                                                                                                          192
                                                                                                                                                                                                                                                                                                                        441
                                                                                                                                                                                                                                                                                                                                                  432
                                                                                                                                                                                                                                                                                                                                                                                                         492
                                                                                                                                                       261
                                                                                                                                                                                252
                                                                                                                                                                                                           321
                                                                                                                                                                                                                                       312
                                                                                                                                                                                                                                                                  381
                                                                                                                                                                                                                                                                                            372
                                                                                                                                                                                                                                                                                                                                                                               501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        972
                                         141
                                                                                               201
                                                                                                                                                                                                                                                                                                                                                                                                                                    561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               981
              72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGTTCACATCCCGAAGTAATGCTCAGGGCCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                            ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                        AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                              GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                   GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                         AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGCCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MGC.
                                                                                            142
                                                                                                                        133
                                                                                                                                                                                                                                    253
                                                                                                                                                                                                                                                                                           313
                                                                                                                                                                                                                                                                                                                                                  373
                                                                                                                                                                                                                                                                                                                                                                                                      433
                                                                                                                                                                                                                                                                                                                                                                                                                                                              493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            922
                                                                 73
                                                                                                                                                    202
                                                                                                                                                                              193
                                                                                                                                                                                                           262
                                                                                                                                                                                                                                                                 322
                                                                                                                                                                                                                                                                                                                      382
                                                                                                                                                                                                                                                                                                                                                                            442
                                                                                                                                                                                                                                                                                                                                                                                                                                   202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        862
             13
                                        82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 13
BC001429
LOCUS
                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
             음
                                        ŝ
                                                                 셤
                                                                                           ö
                                                                                                                     g
                                                                                                                                                   ð
                                                                                                                                                                         셤
                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                                                                                 õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
```

found

ö

139 141 199 201

셤

ç 셤 õ a

ö 8 a õ ద

ò

oy op

8 6 õ å ð g g

ç

g

ογ 음

ö

8 à

```
/procedin_16="CAA30985.1"
/db_xref="G1:37637"

                                                                    Direct Submission
Submitted (15-AUG-1988) Hauptmann R., Ernst Boehringer Institut
fuer Arzneimittelforschung, Dr. Boehringer-Gasse 5/11, A-1121 Wien,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                          Austria
Data kindly reviewed (11-Nov-1988) by Hauptmann
Location/Qualifiers
1. 1560
/organism="Homo sapiens"
/mol_type="mkm" |
/db_xref="taxon:966"
/clone="lambda Pil/3 and others"
                                                                                                                                                                                                                                                                                                                                                       (tegecatgg)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      186. .386
/note-"structural repeat (67 AA)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97.5%; Score 956.8; DB 9; 99.8%; Pred. No. 1.1e-241;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. 1.1e-241;
                                                                                                                                                                                                                                                                                                                                                                         129. 1091
/note="VAC protein (AA 1-320)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               402. .602
/note="structural repeat (67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               651. .854
/note="structural repeat (68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'note="structural repeat (67
                                                                                                                                                                                                                                                                                   /tissue_type="placental" | /tissue_type="placental" | 124 . 132 | /note="Kozak consensus (tcg 129 . 1091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note-"polyA signal"
1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81te"
357 g
                                                                                                                                                                                                                                                                                                                                                                                                                       /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note="polyA
330 c
                         2 (bases 1 to 1560)
Hauptmann, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
Matches 958; Conserv
    2455636
                                                                                                                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            polyA_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BASE COUNT
ORIGIN
                      REFERENCE
AUTHORS
TITLE
JOURNAL
    PUBMED
                                                                                                                                                                                                                                                                                                                                                                            CDS
                                                                                                                                                                               FEATURES
                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRI 12-SEP-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                919
                                                                                                                                                      441
                                                                                                                                                                                                                                                                                                                                                   499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ø
                                                                                                                               321
                                                                                                                                                                                                                     381
                                                                                                                                                                                                                                                                                                                                                                                              501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         979
CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG 259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Craniata; Vertebrata; Euteleostomi;
Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1560)
Mavier-Pogy, I., Reutelingsperger, C.P., Pleters, J., Bodo, G.,
Stratowa, C. and Hauptmann, R.
Cloning and expression of cDNA for human vascular anticoagulant,
Cat-dependent phospholipid-binding protein
Eur. J. Biochem. 174 (4), 585-592 (1988)
                                        AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                          GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGAGACCCTGATGCTGCAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC
                                                                                                                               ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTTATTCCATGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein; vascular anticoagulant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human mRNA for vascular anticoagulant. X12454. X12454.1 GI:37636 phosphoilpid-binding protein; vascular ar Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        740
                                           202
                                                                                                                               262
                                                                                                                                                                          320
                                                                                                                                                                                                                   322
                                                                                                                                                                                                                                                              380
                                                                                                                                                                                                                                                                                                       382
                                                                                                                                                                                                                                                                                                                                                   440
                                                                                                                                                                                                                                                                                                                                                                                              142
                                                                                                                                                                                                                                                                                                                                                                                                                                  200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
```

ö

6

248 141

ö

195 141 255 201 315 261 375 321 435 381 495 441 555 501 615 561 675 621 735 681 795 741 855 801 915 861 975

```
CIGITITAACAICAGGAAGGAGIITAGGAAGAATTITGCCACCTCTCTTTATTCCATGATT 921
                    anticoagulant mature peptide,
                                                                                                                                                                                                                                                                                                                                                                                                                            196 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                                  CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                     256 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                              ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                  AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                             ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                GCAGAAACTCTTCGGAAGGCTATGAAAGCCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                       GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGGGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                    Gaps
                                                                                                                                   ö
                                                                                                                  Length 1566;
 Ŀ
 anticoaqulant'
                                                                                                                                    Indels
                                                                                                                Score 956.8; DB 6;
Pred. No. 1.1e-241;
0; Mismatches 2;
                 /product*/human
1099. .1566.
 /product-'human
                                               1. .1566 / Argantson="Homo sapiens" / //mol_type="genomic RNA" / //db_xref="taxon:9606" a 332 c 357 g 447
                                                                                     447
                                     Location/Qualifiers
                                                                                                                 97.5%;
99.8%;
          139.
                                                                                                                          Local Similarity 99.8
nes 958; Conservative
FT
mat_peptide
FT 3'UTR
                                                                                      ಹ
                                                                                     430
                                                                                                                 Query Match
Best Local Si
Matches 958,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                736
                                                                                                                                                      22
                                                                                                                                                                                            82
                                                                                                                                                                                                                                  142
                                                                                                                                                                                                                                                                                          316
                                                                                                                                                                                                                                                                                                             262
                                                                                                                                                                                                                                                                                                                               376
                                                                                                                                                                                                                                                                                                                                                  322
                                                                                                                                                                                                                                                                                                                                                                     436
                                                                                                                                                                                                                                                                                                                                                                                        382
                                                                                                                                                                                                                                                                                                                                                                                                          496
                                                                                                                                                                                                                                                                                                                                                                                                                             442
                                                                                                                                                                                                                                                                                                                                                                                                                                                556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    862
                                                                                                                                                                                                                                                                        202
                                                 source
                                                                                     BASE COUNT
ORIGIN
                                       FEATURES
                                                                                                                                                      δ
                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                            ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                             Op
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                             à
                                                                                                                                                                                                             q
                                                                                                                                                                                                                                  å
                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                             Q
                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                 40-FEB-1987 JP 87P 37227
SAINO SUKEYUKI, IWASAKI AKIO, SUDA MAKOTO
C12P21/02,C07K13/00,C12N15/00//A61K37/02,(C12P21/02,C12R1:19);
strandedness: Double;
                                                                                                                                                                                                                                                                                                                                                                                                           PAT 29-SEP-1997
                                                                                                                         728
                                                                                                                                                                                                                                                                                                                                        981
          548
                                              608
                                                                 561
                                                                                     668
                                                                                                        621
                                                                                                                                             681
                                                                                                                                                               788
                                                                                                                                                                                   741
                                                                                                                                                                                                     848
                                                                                                                                                                                                                         801
                             501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 1556) Safio, S., Iwasaki, A. and Suda, M. POLYPEPTIDE HAVING ANTI-BLOOD COAGULATING ACTION PATENT: JP 1989020095-A 1 24-JAN-1989; KOWA CO
                                                                                                                                          GTGGTGGGGGACACTTCAGGGTACTACCGGGGATGTTGGTGGTGGTTCTCCTTCAGGCTAAC
                                                                AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                          CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                               GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                      CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                                                                                                                                                                                                                                                        AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAGATGAC
                           GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                           RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tissue_type=placenta;
clone=pMKT7;
                                                                                                                                                                                                                                                                                                                                                                                                         E01816 1566 bp cDNA encoding human anticoagulant. E01816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .135
136. .1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-JUL-1987 JP 1987184428
20-FEB-1987 JP 87P 3723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (man)
JP 1989020095-A/1
24-JAN-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        topology: Linear;
hypothetical: No;
anti-sense: No;
                                                                                                                                                                                                                                                                                                                                                                                                                                    E01816.1 GI:2170068
JP 1989020095-A/1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     *source:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                *source:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             549
                                                                202
                                                                                                                                           622
                                                                                                                                                                                                   189
                                                                                                                                                                                                                                          849
                                                                                                                                                                                                                                                                               606
                                                                                                                                                                                                                                                                                                                     696
                                                                                                                                                                                                                                                                                                                                        922
                                                                                                                                                                                                                                                                                                                                                         1029
        489
                           442
                                                                                  609
                                                                                                      562
                                                                                                                         699
                                                                                                                                                              729
                                                                                                                                                                                                                        742
                                                                                                                                                                                                                                                             807
                                                                                                                                                                                                                                                                                                  862
                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                       15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                     RESULT
E01816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                           ð
                                           d
                                                             ò
                                                                                 셤
                                                                                                     ò
                                                                                                                    윱
                                                                                                                                       ö
                                                                                                                                                           g
                                                                                                                                                                               õ
                                                                                                                                                                                                8
                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                           õ
                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                 ŏ
                                                                                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                       g
```

1035	381	5601	
	922 AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTGCTCCGGAGAAGATGAC 981	1036 AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTGTGGAGAAGATGAC 1095	TO I OF TOOK OF THE STATE OF TH
qa	δ	q Ω	

Search completed: August 28, 2003, 18:14:05 Job time: 2604.33 secs

-

```
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
```

August 28, 2003, 15:43:40; Search time 2602.33 Seconds (without alignments) 15421.677 Million cell updates/sec 981 US-09-970-969-3 981 1 atggcaggtggctgtggcca......tgctctccggagaagatgac 2888711 seqs, 20454813386 residues rotal number of hits satisfying chosen parameters: nucleic search, using sw model IDENTITY_NUC Gapop 10.0 , Gapext 1.0 seq length: 0 seq length: 2000000000 Perfect score: Sequence: Scoring table: 9 B nucleic Searched: Minimum | Maximum | Run on:

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries GenEmbl:* Database

em_vi:* em_htg_hum:* em_htg_inv:* gb_ro:* gb_sts:* gb_sy:* gb_un:* gb_vi:* em_ba:* em_fun:* em_hum: * em_sts:* gb_pat: *
gb_ph: *
gb_pl: *
gb_pr: * gb_ba:* gb_htg:* em_in:* em_or: * em_ov:* em_ro:* em_un:* gb_tn:* gb_om:* em_om: em_pl:*

em_htgo_mus:* em_htgo_other:* em_htg_other:* htgo_hum:* em_htg_vrt:* em_htg_rod:* em_htg_pln:*

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

A13845 H-Sapiens P A0170 DNA sequence E14351 CDNA encodi 133411 Sequence 4 10734 Sequence 20 BC018671 Homo sapi D63423 Mouse mRNA AX305384 Sequence U29396 MNS musculu EC003716 MNS muscul A01772 DNA sequenc A01773 DNA sequenc A01774 DNA sequenc X11253 O. Latipes m M22248 Bovine endo X1367 Bovine mRNA D78178 Bovine mRNA AX178799 Danio rer A1769 DNA sequence 21 M1836 Human place 21 10832 Sequence 3 BC001429 Homo sapi X12454 Human mRNA E01816 CDNA encodi E03096 DNA encodin D00172 Homo sapien 133410 Sequence 2 CM21731 Human lipoc 103745 Human endon 107181 Sequence 12 M30971 Chicken and BC043882 Xenopus 1 D64134 Newt mRNA f A01772 DNA sequenc A01773 DNA sequenc A01774 DNA sequenc X11253 O.latipes m AX401930 Sequence M21730 Rat lipocor AF051895 Rattus no AR262470 Sequence AR262469 Sequence AR262471 Sequence A07367 M munsculus BC004993 Homo sapi BC012804 Homo sapi BC012822 Homo sapi Human place SUMMARIES AX401930 RATLC5 AE051895 CHKANCC2A BC043882 D64134 AX305384 MMU29396 BC003716 OLANNEXM2 BOVENDNX I08832 BC001429 133411 107344 BC018671 10 MUSANXV 133410 HUMLC5 HUMENN 107181 A13845 A01770 E14351 A01773 A01774 E01816 E03096 HUMATC HUMBCI HSVAC 80 Length 1155454 1155650 1155650 1155650 1155650 115504 1155050 115605 115050 115 Query 749.4 749.4 749.4 747.8 473.8 483 494.4 481.4

ALIGNMENTS

PAT 29-JAN-2003

linear

Unclassified.

1 (bases 1 to 981)

Tait,J.F. and Brown,D.S.
Annexin derivative with endogenous chelation sites Patent: US 6323113-A 3 27-NOV-2001;
Location/Qualifiers DNA 981 bp Sequence 3 from patent US 6323313. ARZ62470 ARZ62470.1 GI:28073914 Unknown Unknown RESULT 1
AR262470
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM REFERENCE AUTHORS TITLE JOURNAL FEATURES

Pred. No. is the number of results predicted by chance to have a

Oy 961 CTGCTCTCCGGAGAAGATGAC 981 	RESULT 2 ARA62469 LOCUS DEFINITION Sequence 1 from patent US 6323313. ACCESSION Sequence 1 from patent US 6323313. ACCESSION AR262469.1 GI:28073913 KEYWORDS SOURCE Unknown. ORGANISM Unknown. ORGANISM Unknown. TITLE AUTHORS Tait,J.F. and Brown.D.S. TITLE Annexin derivative with endogenous chelation sites JOURNEL JOURNEL LOCATION(UNALITIERS 1. 981 LOCATION(UNALITIERS) 1. 981 LOCATION(UNALITIERS) 1. 981 ACCESSIONT ACCESSIONT ACCESSION SITES 1. 981 ACCESSIONT ACCESSION SITES 1. 981 ACCESSIONT ACCESSION SITES 1. 981 ACCESSIONT ACCESSION SITES ARACOUNT ACCESSION SITES ARACOUNT ACCESSION SITES ACCESSION S	Query Match 99.7%; Score 977.8; DB 6; Length 981; Best Local Similarity 99.8%; Pred. No. 2.4e-247; Matches 979; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	Oy 1 ATGGCAGGTGGCCATATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCT 60	Oy 61 GGATITGAIGAGGGGGTGAIGCAGAAACTCTTCGGAAGGCTAIGAAGGCITGGGCACA 120	Oy 121 GATGAGGAGCATCCTGACTCTGTTGACATCCGAAGTAATGCTCAGCGCCAGGAAATC 180 111	OY 181 TCTGCAGCTTTTAAGACTCTGTTTGGCAGGATCTTCTGGATGACCTGAAATCAGAACTA 240 181 TCTGCAGCTTTTAAGACTCTGTTTGGCAGGATCTTCTGGATGACCTGAAATCAGAACTA 240	OY 241 ACTGGAAAATTGAAAAATTAATTGTGGCTCTGATGAAACCTCTCGGCTTTATGATGCT 300 1	OY 301 TATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAATGAAAAAGTACTGACAAAATT 360 11	OY 361 ATTGCTTCAAGGACACCTGAAGAACTGAGGCCATCAAACAAGTTTATGAAGAAGATAT 420	Qy 421 GGCTCAAGCCTGGAAGATGACGTGGGGAACATTCAGGGTACTACCAGGGATGTTG 480 1	OY 481 GTGGTTCCTTCAGGCTAACAGAGACCCTGATGCTGGAATTCATGAGGTCAAGTTGAA 540	QY 541 CAACATGCTCAGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAAAAG 600 	QY 601 TTTATCACCATCTTTGGAACACGAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTAC 660 1 1
source 1981 /organism="unknown" E COUNT 286 a 187 c 251 g 257 t GIN	100.0%; Score 981; DB 6; Length 981;	241 ACTGGAAAATTGAAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCT 300 	301 TATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATT 360 	361 ATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAATAT 420 	421 GGCTCAAGCCTGGAAGATGACGTGGGGGGACACTTCAGGGTACTACCAGCGGATGTTG 480 	481 GTGGTTCTCCTTCAGGCTAACAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAA 540 	541 CAAGATGCTCAGGCTTTATTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAG 600 	601 TTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTAC 660 	661 ATGACTATATCAGGATTTCAAATTGAGGAAACCATTGACCGGGAGACTTCTGGCAATTTA 720 	721 GAGCAACTACTTGCTTGTGAAATCTATTGGAAGTATACCTGCCTACCTTGCAGAG 780 	781 ACCTCTATTATGCTATGAGGGGGCTGGGACAGATGATCATACCTCATCAGAGTCATG 840 	841 GTTTCCAGGAGTGAGATTGATCTGTTTAACATCAGGAAGGA	901 ACCTCTTTATTCCATGATTAAGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTG 960

361 ATTGCTTCAAGGACACCTGAAGACTGAGACCATCAAACAAGTTATGAAGAAGATTT 420	RESULT 4 A07367 LOCUS DEFINITION M.musculus VAC-alpha cDNA. ACCESSION NO7367 Nus musculus (house mouse) NUSSION A07367.1 GI:412270 KEYWORDS SOURCE Mus musculus (house mouse) ORGANISM Mus musculus (house mouse) AUTHORS AUTHORS LOCATION (Mus musculus (house) AUTHORS TOURNAL Patent: DE 3810331-A 3 05-OCT-1989; LOCATION (Musculus (house)) AUTHORS TOURNAL Patent: DE 3810331-A 3 05-OCT-1989; COGOD.STATT-1 AUTHORS TOURNAL PATENTALE (HOUSE) AUTHORS TOURNAL PATENTALE (HOUSE) AUTHORS TOURNAL AUTHORS TOURNAL (HOUSE) AUTHORS TOU
09 661 ATGACTATATCAGGATTTCAAATTGAGGAACCATTGACCGCGAGACTTTA 120	Query Match 99.5%; Score 976.2; DB 6; Length 981; Best Local Similarity 99.7%; Pred: No. 6.38-247; Anteles 978; Matches 978; Conservative 0; Mismatches 3; Indels 0; Gaps 0; Qy 1 ArdccAcdrocrofarGcCACACACACTCCACACACTCACACACTCACACACTCCCT 60 Qy 61 GGATTGATGACGGCACACACACACTCTCGGAGGCATTGACACTCCCT 60 Qy 61 GGATTGATGACGGCACACACACACTCTCGGAGGCATTGACACACAC

SG Qy 976 GATGAC 981	RESULT 5 BC004993 0; LOCUS BC004993 DEFINITION Homo sapiens annotation applied to the complete cds.	VERSION VERSION KEYWORDS SOURCE ODDRCE	OKGANISM REFERENCE AUTHORS		<u>-</u>	ഗ ഒ		TITLE 5 JOURNAL 8 MEDLINE	555 REFERENCE 2 (bases 1 to 15 AUTHORS Strausberg, R. 7ITLE Direct Submission	JOURNAL	REMARK COMMENT 8		infe@bcgsc.bc.ca Steven Jones, Jen Susanna Chan, Rea B Letticia Hsiao, M		George Yang, Scot Clone distributio through the I.M.A	FEATURES
RDPDAGIDEAQVEQDAQALFQAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYWTISG FQIEETIDRETSGNLEQLLLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVWVSR SEIDLFNIRKEFRKNFATSLYSMTKGDTSGDYKRALLLLCGEDD* 423 a 291 c 327 g 425 t	Similarity 99.5%; Score 958; DB 6; Length 1466; Similarity 99.5%; Pred. No. 4.1e-242; 1; Conservative 0; Mismatches 5; Indels 0; Gaps GGCCATATGGCACAGGTTCTCAGAGCACTGTGACTGCTTCCCTGGATTTGATGAGGGG 7:	GTGGTATGGCACAGGTTCTCACAGGCACTGTCACTGACTTCCCTGGATTTCATCACGG 88 GCTGATGCAGAACTCTTCGGAAGGCTAGAAGGCTTGGGCACAGATGAGAGCAGCAACAT 13	GCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGCATC 14: CTGACTCTGTGACATCCCGAAGTAATGCTCACGGCAAGTAAATCTTTAAG 19	CTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAG 20 ACTCTGTTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTAACT	AAATTAATTGIGGCTCTGATGAAACCCTCTGGGCTTTATGATGCTTATGAACTGAACAT 31 	GCCTTGAAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACA 37 	CCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAATATGGCTCAAGCCTGGAA 43	GATGACGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTGGTTCTCCTTCAG 49:	GCTAACAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCT 5	TTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTT 615	GGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGA 675 	TTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTT 735 	GCTGTTGTGAAATCTATTGGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCT 795	ATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAG 855 	ATTGATCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCC 915	ATGATTAAGGGAGTACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAA 975
BASE COUNT ORIGIN	Query Match Best Local Sin Matches 961; Qy 16 GC	Db 29 Qy 76		Db 149 Qy 196 Db 209	Oy 256 Db 269	Qy 316 Db 329	Qy 376 Db 389	Qy 436 Db 449	Qy 496 Db 509	Qy 556 Db 569	Qy 616 Db 629	Qy 676 Db 689	Oy 736 Db 749	0y 796 Db 809	Oy 856 Db 869	Oy 916 Db 929

```
POY 976 GATCAC 981

RESULT 5

ECO04930

ECO049
```

Fri

```
1 Chases Lucion Filates, Calling, House, Lords, Lor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BC012804 1539 bp mRNA linear PRI 06-JUN-2003
Homo sapiens annexin A5, mRNA (cDNA clone MGC:2795 IMAGE:2961097),
complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                  958 ATTGATCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTTATTCC 1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      915
                                                                                                                                                                                                                                                                             855
                                                                                                                                                                                                                                                                                                                         957
                                           777
                                                                                       735
                                                                                                                                     837
                                                                                                                                                                                 795
                                                                                                                                                                                                                               897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (15-AUG-2001) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                        ATGAAGGGAGCTGGGACAGATGATGATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAG
                                                                                                                                                                                                                                                                                                   ATTGATCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   916 ATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAA
                                                                                            TTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTT
                                                                                                                                                                                      GCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCT
GGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
22388257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NIH-MGC Project URL: http://mgc.nci.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       human and mouse cDNA sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BC012804.1 GI:15215411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 (bases 1 to 1539)
Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATGAC 1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             976 GATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MGC.
                                                                                                                                                                                                                                                                                                                                                                         856
                                              718
                                                                                         9/9
                                                                                                                                       778
                                                                                                                                                                                   736
                                                                                                                                                                                                                               838
                                                                                                                                                                                                                                                                             964
                                                                                                                                                                                                                                                                                                                           868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 6
BC012804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                             οğ
                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                      음
                                                                                         õ
                                                                                                                                   셤
                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                               /product="annexin 5"
/protein_id="AAH0499.1"
/protein_id="AAH0499.1"
/d_xref="01:13436443"
/db_xref="0.0MAD0443"
/db_xref="0.0MAD0448043"
/db_xref="0.0MAD04480443"
/db_xref="0.0MAD04480443"
/translation="MAQ0448077DEPGFDERADAETLRKAMKGLGTDEESILFLLTS
RSNAQROEISAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKG
AGTNEKVLTEITASRRPEELAAIKOYYEEEVGSELDDVYGOTTGYYCRMLVYLLQAN
RDPDAGIDEAQVEGOAALFQAGELKWGTDEEKFTIFGTRSVSHLRKVFDYYMTISG
FQIEFTIDREFSGALMATSLKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSR
SEIDLENIRKEFRKNFATSLYSMIKGDTSGDYKKALLLLCGEDD"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACAT 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCTTGAAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACA 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAA 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTAACAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTCGCTATGGCACAGGTTCTCACAGGCACTGTGACTGCACTTCCCTGGATTTGATGAGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATGACGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1536;
                   /organism-"Homo sapiens"
//organism-"Homo sapiens"
//db_xref="taxon.9606"
/clone="MGC:4402 IMAGE:2906015"
/clone="MGC:4402 IMAGE:2906015"
/clone_lib="NIH-MGC_20"
/lab_host="DH10B-R"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 958; DB 9; I
Pred. No. 4.1e-242;
0; Mismatches 5;
                                                                                                                                                                                                                                                /note="synonyms: ANX5, EN/Ob xref="LocusID:308"
/db_xref="IocusID:308"
/db_xref="MIM:131230"
124. .1086
/codon_start=1
                                                                                                                                                                                 /note-"Vector: porB7"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      352 g
                                                                                                                                                                                                                               /gene="ANXA5"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97.78;
99.58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        320 C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                    1. .1536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            598
  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                           gene
                                                                                                                                                                                                                                                                                                                           CDS
```

셤

ð 셤 ò 셤 à g õ g

셤 ò g à g õ 용 ò

ò

9

```
Eukaryota: Metazoa: Chordata: Craniata; Vertebrata: Euteleostomi;
Mammalia: Eutheria: Primates: Catarrhini; Hominidae: Homo.

1. (bases 1 to 1539)
Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G.,
Klausner, R.D., Collina, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D.,
Alischul, S.F., Zeeberg, B., Buetow, K.H., Schefer C.F., Bhat, N.K.,
Hopkins, R.F., Jordan, H., Moore, T., Max, S.L., Wang, J., Haieh, F.,
Diatchenko, L., Marusina, K., Farmer, A.A., Rubin, G.M., Hong, L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L.,
Carninci, P., Prange, C., Rah, S.S., Loquellano, N.A., Peters, G.J.,
Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J.,
Morlay, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W.,
Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Glbbs, R.A.,
Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodriques, S.,
Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,
Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D.,
Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BC012822 1539 bp mRNA linear PRI 06-JUN-2003
Homo sapiens annexin A5, mRNA (cDNA clone MGC:4465 IMAGE:2961097),
complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTGATCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCC 915
                                                                                                                                                                                                                                                                  GCTGTTGTGTAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCT
                                                                                                                          496 GCTAACAGAGCCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCT
                                                                                                                                                                                                  556 TIATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTT
                                                                                                                                                                                                                                                                                                                                                                                                               GCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BC012822.1 GI:15215458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                    919
                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                               736
                                                                                                                                                                                                                                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BC012822
                                                     à
                                                                                      g
                                                                                                                          ð
                                                                                                                                                         g
                                                                                                                                                                                                  ð
                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                        Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at: http://image.llnl.gov Series: IRAL Plate: 2 Row: b Column: 4.
Location/Qualifiers
1. .1539
/organism:Homo sapiens*
/Mol_type="mkNA"
/db_xref="taxon:9606"
/clone="MGC:2795 INAGE:2961097"
/tissue_type="mkNA"
/clone_lib="NIH.MGC_17"
/lab_hogt="bhildb-R"
/lab_host="bhildb-R"
/lab_host="bhildb-R"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /traislation-MAQVIRGTVTDEPGEDERADAETLEKAMKGLGTDEESILTLLIS
RSNAQRQSISAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKG
AGTNEKVLTETIASRPPELRAIKOYVEEEVGSELEDDVGOTSGYYQRMLVYLLQAN
RDPDAGIDEAQVEODAQALFGAGELKWGTDEEKFITIFGTRGYSHLRKYFDKYMTISG
FQIEETIDRETSGNLEQLLLAVVKSIRSIPATLAFTYAMKGAGTDDHTLIRVMVSR
SEIDLENIRKEFRKREATSLYSMIKKDTSGDYKKALLLLCGEDD"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATC 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      376 CCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAA 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          75
                                                                                                                                              Anuradha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCCATATGGCACAGGTTCTCAGAGGCACTGTCACTGACTTCCCTGGATTTGATGAGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCTTGAAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                CDNA Library Preparation: Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Institute for Systems Blology
http://www.systemsblogy.org
contact: amadan6systemsblology.org
Anup Madan, Jessica Pahey, Erin Helton, Mark Ketteman, Anurad
Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 958; DB 9; Length 1539;
Pred. No. 4.1e-242;
0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="synonyms: ANX5, ENX2, PP4"
/db_xref="LocusID:308"
/db_xref="MIM:131230"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                432 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /protein_id="AAH12804.1"
/db_xref="G1:15215412"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /db_xref-"LocusID:308"
                                                                                                                                                                                                                                                                                                                                                                                                             /note="Vector: pOTB7"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /product-"annexin 5"
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  355 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                              /gene-"ANXA5"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 99.5%;
Matches 961; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  320 C
                                                                                                                                                                                                                                                                                                                                                                                                                            1. .1539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CDS
                                                                                                                                                                                                                                                    FEATURES
 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              đ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
```

```
Human placenta anticoagulant protein PP4 mRNA, complete cds. M19384 J03368 J03368 M19384 J03368 M19384 HIPAUGHIPAUGHIPAUGHIPA M19384 J03369 M19384 HORD Sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
                                                                                                                                                                                                                                                                                                                                                                                               615
                                                                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                                                                                           675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               975
                                                             360
                                                                                          315
                                                                                                                      420
                                                                                                                                                   375
                                                                                                                                                                                480
                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                        495
                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                    555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     735
   CTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAG 300
                                                                                                                                                                                                              CCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAA 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo. (bases 1 to 1582) Grundmann, U., Abel, K.J., Bohn, H., Lobermann, H., Lottspeich, F. and
                                                                                                                                                                     GGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTGATCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAA
                                              GCCTTGAAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACA
                                                                                                                                                                                                                                 GATGACGTGGTGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCT
                                                                                            AAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACAT
                                                                                                                                                                                                                                                                                                                                                                                                 TTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTT
                                  |||||||
| GATGAC 1086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kupper, H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1021
    241
                                                             301
                                                                                                                                                    316
                                                                                                                                                                                                              376
                                                                                                                                                                                                                                                                          436
                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                    961
                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                 929
                                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                                                                           919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1081
                                  196
                                                                                          256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          장, 협
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                         qq
                                                                                                                a
                                                                                                                                                   ò
                                                                                                                                                                             g
                                                                                                                                                                                                        οχ
                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                        οy
                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                        q
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                               ò
                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /translation="MAQVLROTVTDEPGEDERADAETLRKAMKGLGTDEESILTLLTS
RSNAQRQEISAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKG
RONEKVLETIASKTPEELRAIKOVYEEFGSSLEDDVOFOTSGYYQRMLVVLLQAN
RDPDAGIDEAQVEQDAAALFQAELKWGTEKFTITGTRSVSHLRKVFDKYMTISG
FQIEETIDRETSGNLEGLLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMYSR
SEIDLFNIRKEFRKRFATSLYSMIKGDTSGDYKKALLLLCGEDD"
                                                                                                                                                                                                                                                                                                                                                                                                 found
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGACTCTGTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAG 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATC 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             75
                                                                                                                                              Submitted (15-AUG-2001) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                            Clone distribution: MGC clone distribution information can be for through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAL Plate: 10 Row: k Column: 21.
Location/Qualifiers
1. .1539
Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E., Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A. Generation and initial analysis of more than 15,000 full-length
                                                                                                                                                                                                                                                                                                                                  contact: amadan@systemsbiology.org
Anup Madan, Jessica Fahey, Erin Helton, Mark Ketteman, Anuradha
Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCCATATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                         (LLNL)
                                             human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1539;
                                                                                                                                                                                                                         Contact: MGC help desk
Email: cgapbs-rémail.nih.gov
Tissue Procurement: ATCC
CDNA Library Preparation: Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium
DNA Sequencing by: Institute for Systems Biology
http://www.systemsbiology.org
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 958; DB 9; Length 15
Pred. No. 4.1e-242;
); Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="mRNA"
//db_xref="taxon:9606"
//db_xref="taxon:9606"
//clone="MCC:4465 IMAGE:2961097"
//clone="MCC:4465 IMAGE:2961097"
//clone="Lib="MIS-MCC.17"
/lab.host="DH10B-R"
//note="Vector: pOTB7"
                                                                                                                                                                                                             NIH-MGC Project URL: http://mgc.nci.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PP4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /product-"annexin 5"
/protein_id-"AAH12822.1"
/db_xref-"GI:15215459"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism-"Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note="synonyms: ANX5,
/db_xref="LocusID:308"
/db_xref="MIM:131230"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /db_xref="LocusID:308"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         р
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ó;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /gene="ANXA5"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tch 97.7%;
al Similarity 99.5%;
961; Conservative
                                                                                                       (bases 1 to 1539)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ç
                                                                                                                                   Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .1539
                                                                                                                      Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                         JOURNAL
MEDLINE
PUBMED
                                                                                                     REFERENCE
AUTHORS
                                                                                                                                   TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene
                                                                                                                                                                                                             REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
```

ö g ò g ò us-09-970-969-3.rge

```
/codon_table=11
/transl_table=11
/product='vascular anticoagulating protein"
/product='vascular anticoagulating protein"
/product='vascular anticoagulating protein"
/prodein_id='Ga:410788"
/db_xref='Ga:410788"
/db_xref=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA linear PAT 01-SEP-1993 anticoagulating protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          735
                                                                                                                                                                                                                                                                                                                                                               855
                                                                                                                                                                                                                                                                                                                                                                                                                                               915
                                                      615
                                                                                                                                  675
                                                                                                                                                                                                                                                                                      795
                                                                                                                                                                                                                                                                                                                         924
                                                                                           744
                                                                                                                                                                    804
                                                                                                                                                                                                                                                  864
                                                                                                                                                                                                                                                                                                                                                                                                        984
                684
                                                                                                                              796 ATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                               856 ATTGATCTGTTTAACATCAGGAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTAACAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCT
                                                    805 TITCAAATIGAGGAAACCATIGACCGCGAGACTICIGGCAATITAGAGCAACTACTCCTT
                                                                                                                                                                                                                                                                                                               GCTGTTGTGTATTCTATTCGAAGTATACCTGCCTACCTTGCAGGACCCTCTATTATGCT
                                                                                                                                                                                                                                                                                                                                                                                        GCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCT
                                                                                                                                                                                                               TTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WHICH CODE FOR THEM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 963;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 956.8; DB 6;
Pred. No. 8.5e-242;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          construct"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VASCULAR ANTICOAGULANT PROTEINS, DNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MANUFACTURE AND APPLICATION THEREOF
Patent: WO 8807576-A 1 06-OCT-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="synthetic co
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A01769 963 bp
DNA sequence (gaa) for vascular
A01769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
1. .963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 963)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GI:410787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              976 GATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
Matches 958; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A01769.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       285
                                                                                                                                                                                                             949
                                                                                                                                                                                                                                                                                        736
                                                                                                                                                                                                                                                                                                                               865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 9
A01769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Locus
                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                    ò
                                                                                       g
                                                                                                                                  ò
                                                                                                                                                                q
                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                             /translation-*MAQVLRGTVTDEPGFDERADAETLRKAMKGLGTDEESILTLLTS
RSNAQRQEISAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKG
AGTNEKVLTEITASRRPEELAAIKOYYEEFGGSSLEDDVYGFOTSGYYORMLYVLLQAN
RDPDAGIDBAGUDGAQVEQDAQALEKWGTDEEKFTIFGTRSVSHLRKVFDKYMTISG
RQIEGTIDRGTSGNADQLALAVKSIRSIPATLATAMKGAGTDDHTLIRVWSR
SEIDLFNIRKEFRKNFATSLYSMIKGDTSGDYKKALLLLCGEDD*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                         Original source text: Homo sapiens (clone: PP4-[14,20,26,48].) placenta cDNA to mRNA.
Draft entry and computer-readable sequence for [1] kindly provided by U.Grundman, 19-APR-1988.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATC 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAG 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAATTAATTGTGGCTCTGATGAAACCCTCTGGGCTTTATGATGCTTATGAACTGAAACAT 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCTTGAAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACA 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAA 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       75
cuaracterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family Proc. Natl. Acad. Sci. U.S.A. 85 (11), 3708-3712 (1988) 88224495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATGACGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTAACAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 1582;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note="g in PP4-[14,26,48]; c in PP4-20*
/replace="c"
                                                                                                                                                                                                                                                                                                                                                                                                      /product-"anticoagulant protein 4"
/protein_id-"AAB59545.1"
/db_xref-"G1:189615"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; Score 958; DB 9; 1; Pred. No. 4.1e-242; 0; Mismatches 5;
                                                                                                                                                                                                                                                                                    /clone="PP4-[14,20,26,48]."
/tissue_type="placenta"
<1. .1582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            449 t
                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                 /product-"PP4 mRNA"
151. .1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          433 a 336 c 364 g
bp upstream of Smal site.
                                                                                                                                                                                                                                                                                                                                                                                      /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97.78;
llarity 99.58;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                           2967495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mc
Local 5
961;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              496
                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BASE COUNT
ORIGIN
                                                    JOURNAL
                                                                         MEDLINE
                                                                                           PUBMED
                                                                                                                                                                                                                                                                                                                               mRNA
                                                                                                                                                                                                                                                                                                                                                                 CDS
                                                                                                                                                                                         FEATURES
              TITLE
                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
```

ö

us-09-970-969-3.rge

	Db 373 GAACTGAGAGCCATCAAAGAGTTATGAAGAATATGGCTCAAGCCTGGAAGATGAC 432	QY 682 AFTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT 741 Db 673 ATTGAGGAAACCATTGACCGGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT 732 QY 742 GTGAAATCTATTCGAGAGTTCTGGCAATTTAGAGCACTCCTTGCTGTT 732 Db 732 GTGAAATCTATTCGAAGTATACCTGCTACCTTGCAGAGACCCTCTATTATGCTATGAAG 801 Db 733 GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCTCTATTATGCTATGAAG 792	Oy 802 GGAGCTGGGACAGATCATACCCTCATCAGAGTTCCAGGAGTGATGAT 861 Db 793 GGAGCTGGGACAGATGATCATACCCTCATCAGGTTCCAGGAGTGAGATTGAT 852 Oy 862 CTGTTTAACATCAGGAGGAGTTTAGGAAGATTTTGCCACCTCTTTATTCCATGATT 921 I	RESULT 12 108832	TITLE HUMAN PROFESS HAVING ANTICOAGULANT AND ANTI-INFLAMMATORY ACTIVITY JOURNAL Patent: WO 8805659-A 3 11-AUG-1988; FEATURES Location/Qualifiers Source 11454 Acrganism="unknown" BASE COUNT 434 a 279 c 325 g 416 t	Ouery Match 97.5%; Score 956.8; DB 6; Length 1454; Best Local Similarity 99.8%; Pred. No. 8.4e-242; Matches 958; Conservative 0; Mismatches 2; Indela 0; Gaps 0; Qy 22 AIGGCACAGGITCTCAGAGGCACTGIGACTGACTTCCCTGGAITTGAIGAGGGCTGAI 81
Qy 862 CTGTTTAACATCAGGAAGGAGTTTAGGAAGTTTTGCCACCTCTTTTATTCCATGATT 921 Db 841 CTGTTTAACATCAGGAGGATTTAGGAATTTTGCCACCTCTTTATTCCATGATT 900 Qy 922 AAGGGAGATACATCTGGAGCTATAAGAAAGCTTTTGCCTGCTCTCTTTATTCCATGATGC 981 Db 901 AAGGGAGATACATCTGGGGACTATAAGAAGCTCTTCTGCTGCTCTCTGGAGAAGATGAC 981 Db 901 AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTGTGGAGAAGATGAC 960	HUMATC LOCUS M18366.1 GI:179131 KEYNORDS ACCESSION M18366.1 GI:179131 KEYNORDS ANTICOAQUIANT. ONGANISM HOMO SAPLENS CONGANISM HOMO SAPLENS HOMO SAPLENS FURATOOLS HOMO SAPLENS HOMO SAPLENS FURATOOLS HOMO SAPLENS FURATOOLS HOMO SAPLENS HOMO SAPLENS FURATOOLS HOMO SAPLENS HOMO S			BASE COUNT 421 a 280 c 325 g 418 t ORIGIN 177 bp upstream of PstI site. Query Match Query Mat	Qy 82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAACCCTGACT 141 I	QY 202 TTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAAATTTGAAAATTA 261

```
/traslation="MAQVLRGTVTDEPGEDERADAETLRKAMKGLGTDEESILTLLTS
RSNAQRQEISAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKG
RSNAQRQEISAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYEDAYEDEADBACIDEAQVEGDAVGTPERQAGELARIKGTDEEKFTIFGTRSVSHLRKVFDKYMTISG
FQIEFTIDRETSGNLEQLLAVVKSTRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSR
SEIDDENIRKBEFRGNAATSLYSMIKGDTSGDYKKALLLCGEDD"
304 c 342 g 436 t
                                                                                                                                                                                                                                                                                       Contact: nisc_modenhgri.nih.gov
Shevofbenko.X., Wetherby,K.D., Beckstrom-Sternberg.S.W.,
Benjamin,B., Blakesley,R.W., Bouffard,G.G., Brinkley,C., Brooks,S.,
Dietrich,N.L., Guun,X., Gupta,J., Ho.S.-L., Karlins,E., Legaspl,R.,
Lim,M., Maduro,O.L., Masiello,C., Mastrian,S.D., McCloskey,J.C.,
McDowell,J., Pearson,R., Snyder,B., Stantripop,S., Thomas,P.J.,
Ilongson,E.B., Touchman,J.W., Tsurgeon,C., Vogt,J.L., Walker,M.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              142 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG 201
                                                                                                                                                                                                                                                                                                                                                                                                                      Clone distribution: MGC clone distribution information can be fou through the I.M.A.G.E. Consortium/LINL at: http://image.llnl.gov series: IRAL Plate: 4 Row: o Column: 24
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA g1: 219480.
Location/Qualifiers
                   Euteleostom1;
                                                                         Direct Submission
Submitted (12-DEC-2000) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: cgapbs-remail.nih.gov
Tissue Procurement: DCTD/DTP
CDNA Library Preparation: Rubin Laboratory
CDNA Library Arayed by: The LiM.A.G.E. Consortium (LLNL)
DNA Sequencing by: National Institutes of Health Intramural
Sequencing Center (NISC),
Galthersburg, Maryland;
Neb Site:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ő
                  Craniata; Vertebrata; E
Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /db_xref="taxon:9606"
/clone="MGC:2261 IMAGE:3140878"
/tissue_type="fovary, adenocarcinoma"
/clone_lib="niH_MGC_9"
/lab_host="bH10B-R"
                                                                                                                                              NIH-MGC Project URL: http://mgc.nci.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 956.8;
Pred. No. 8.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .1538
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="LocusID:308"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /product="annexin A5"
/protein_id="AAH01429.1"
/db_xref="G1:12655149"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note-"Vector: porB7"
                                  Primates;
                   Eukaryota; Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /codon_start=1
                                                                                                                                                             Contact: MGC help desk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97.58;
                                           1 (bases 1 to 1538)
Strausberg, R.
                                 Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         958;
                                                                                                                                 USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                             REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1538 bp mRNA linear PRI 12-JUL-2001 annexin A5, clone MGC:2261 IMAGE:3140878, mRNA,
                                                                                                                                                                                                                                                312
                                                                                                                                                                                                                                                                                                        372
                                                                                                                                                                                                                                                                                                                                                               432
                                                                                                                                                                                                                                                                                                                                                                                                                      492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               792
                                                                                                                                 192
                                                                                                                                                             261
                                                                                                                                                                                         252
                                                                                                                                                                                                                                                                                                                                    441
                                                                                                                                                                                                                                                                                                                                                                                                                                                    561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         972
                                             141
                                                                                                   201
                                                                                                                                                                                                                    321
                                                                                                                                                                                                                                                                             381
                                                                                                                                                                                                                                                                                                                                                                                           501
                72
                                                                                                                                                                                                                 ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                   AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                     AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                AGAGACCCTGATGCTGGAATTGATGAAGCTCGAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCGTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGCCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGATCCTGACT
                                                                                                                                                                                                                                                                                                                                 GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                           GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGTTTAACATCAGGAAGTTTAGGAAGAATTTTGCCCACCTCTTTATTCCATGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GI:12655148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens,
complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BC001429
BC001429.1
MGC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BC001429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ношо
                                                                                                                                                                                                                                             253
                                                                                                                                                                                                                                                                                                     313
                                                                                                                                                                                                                                                                                                                                                            373
                                                                                                                                                                                                                                                                                                                                                                                                                                                 502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           922
                                                                                                142
                                                                                                                            133
                                                                                                                                                                                      193
                                                                                                                                                                                                                  262
                                                                                                                                                                                                                                                                                                                                 382
                                                                                                                                                                                                                                                                                                                                                                                         442
                                                                                                                                                                                                                                                                                                                                                                                                                    133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  742
               13
                                          82
                                                                                                                                                          202
                                                                                                                                                                                                                                                                          322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                622
                                                                      73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 13
BC001429
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
               ద
                                          ò
                                                                     g
                                                                                                ò
                                                                                                                           ద
                                                                                                                                                         ç
                                                                                                                                                                               g
                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                Q
                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                윱
```

found

ö

139 141

```
/translation-"MAQVLRGTVTDEPGFDERADAETLRKAMKGLGTDEESILTLLTS
RSNAQRQEISAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKG
AGTNEKVLTEIIASRTPEELRAIKQVYEEFGSELEDDVORDSGYYORMLVVLLQAN
RDPDAGIDEAQVRQDAQALEKWGTDEEKFTTIFGTRSVSHLRKVFDKYWTISG
FQIEFTIDRFSGNLBQLLLAVVKSIRSIPATLAFTYTYAMKGAGTDDHTLIRVWYSR
SEIDLFNIRKEFRKNFATSLYSMIKGDTSGDYKKALLLLCGEDD"
                                   Direct Submission
Submitted (15-AUG-1988) Hauptmann R., Ernst Boehringer Institut
fuer Arzneimittelforschung, Dr. Boehringer-Gasse 5/11, A-1121 Wien,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA 488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTGTGGCTCTGATGAAACCCTCTCGGCTTATGATGATGAACTGAAACTGAAACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1560;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                    Austria
Data kindly reviewed (11-Nov-1988) by Hauptmann
Location/Qualifiers
                                                                                                     1. .1560

/organism="Homo sapiens"

/mol_type="mRNA" 1806"

/clone="lambda Pll/3 and others"

/tissue_type="placental"

124. .132

/note="Kozak consensus (tegecatgg)"
                                                                                                                                                                                                                                                                                                                                                 AA)
                                                                                                                                                                                                                                                                                                                                                                        AA)"
                                                                                                                                                                                                                                                                                                                                                                                              ¥¥
                                                                                                                                                                                                                                                                                                                                                                                                        879. .1079
/note="structural repeat (67 AA)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 956.8; DB 9;
Pred. No. 8.4e-242;
); Mismatches 2;
                                                                                                                                                                                                129. 1091
/note-"VAC protein (AA 1-320)"
                                                                                                                                                                                                                                                                                                                                       186. .386
/note="structural repeat (67
                                                                                                                                                                                                                                                                                                                                                                                  651. .854
/note="structural repeat (68
                                                                                                                                                                                                                                                                                                                                                            402. .602
/note-"structural repeat (67
                                                                                                                                                                                                                                                     /db_xref-"SWISS-PROT:P08758"
                                                                                                                                                                                                                                /proteIn_id="CAA30985.1"
/db_xref="G1:37637"
                                                                                                                                                                                                                                                                                                                                                                                                                                    /note-"polyA signal"
1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                               357 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                         /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note-"polyA
330 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97.58;
              2 (bases 1 to 1560)
Hauptmann, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 958; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          429
   2455636
                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                                                                        misc_feature
                                                                                                                                                                                                                                                                                                                                                            misc_feature
                                                                                                                                                                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                               misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                      polyA_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  382
                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BASE COUNT
ORIGIN
             REFERENCE
AUTHORS
TITLE
JOURNAL
   PUBMED
                                                                                             FEATURES
                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              පු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-SEP-1993
                                                                                                                                                                                     499
                                                                                                                                                                                                                                                                                                                        619
                                                                                                                                                                                                                                                                                                                                             619
                                                                                                                                                                                                                                                                                                                                                                                                        Ø
                                                                     321
                                                                                                                  381
                                                                                                                                                              441
                                                                                                                                                                                                            501
                                                                                                                                                                                                                                 559
                                                                                                                                                                                                                                                       561
                                                                                                                                                                                                                                                                                                   621
                                                                                                                                                                                                                                                                                                                                                                                            741
                                                                                                                                                                                                                                                                                                                                                                                                                                        801
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGTTGACATCCCGAAGTAATGCTCAGGCCCAGGAAATCTCTGCAGCTTTTAAGACTCTG 259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutherla: Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 1560)

Maurer-Fogy,I., Reutelingsperger,C.P., Pieters,J., Bodo,G., Stratowa,C. and Hauptmann,R.
Cloning and expression of cDNA for human vascular anticoagulant, Cat-dependent phospholipid-binding protein

Eur. J. Biochem. 174 (4), 585-592 (1988)
                                                                                                                                                                                                                                                    AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                              GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                          GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                           ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                    ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein; vascular anticoagulant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1560 bp mRNA X1245 Human mRNA for vascular anticoagulant. X12454.1 GI:37636 phospholipid-binding protein; vascular an Homo appiers (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo saptens
                      202
                                                                    262
                                                                                          320
                                                                                                                 322
                                                                                                                                        380
                                                                                                                                                             382
                                                                                                                                                                                    440
                                                                                                                                                                                                          442
                                                                                                                                                                                                                               200
                                                                                                                                                                                                                                                     502
                                                                                                                                                                                                                                                                            260
                                                                                                                                                                                                                                                                                                   562
                                                                                                                                                                                                                                                                                                                       620
                                                                                                                                                                                                                                                                                                                                              622
                                                                                                                                                                                                                                                                                                                                                                                           682
                                                                                                                                                                                                                                                                                                                                                                                                                  740
                                                                                                                                                                                                                                                                                                                                                                                                                                        742
                                                                                                                                                                                                                                                                                                                                                                                                                                                             800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HSVAC
                                                                                                                                                                                                                                               ô
                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                           ద
                      ŝ
                                            a
                                                                  ò
                                                                                     g
                                                                                                                 à
                                                                                                                                   g
                                                                                                                                                        ò
                                                                                                                                                                               g
                                                                                                                                                                                                         õ
                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                ç
                                                                                                                                                                                                                                                                                                                                              ç
                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           õ
```

ö

peptide,

ö

195 141

81

255

315

261

201

375

435

321

495

381

555

441

675

621

561

615

501

735

681

795

741 855 801 915

861 975

ద ö g ð g ð

요

ò 요 õ g

ô 셤 ð a 셤 ð 셤

ò

```
CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTTTTTCCATGATT 921
                                                                                                                                                                                                                                                                                                                                                                                                AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGACATCCTGACT
                                                                                                                                                                                                                                                                                                                                                   262 ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 436 AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          682 ATTGAGGAAACCATTGACCGGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            742 GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGCCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGGGGGCTGAT
                                                                                                                                                                                                                                  Gaps
                                  anticoagulant mature
                                                                                                                                                                                                                                ö
                                                                                                                                                                                                Length 1566;
 Ę
/product='human anticoagulant'
                                                                                                                                                                                                                                Indels
                                                                                                                                                                                              ; DB 6;
.4e-242;
es 2;
                               /product='human
                                                                                                                                                                                                                                0; Mismatches
                                                                          1. 1566
/organism="Homo sapiens"
/mol_type="genomic RNA"
/db_xref="texon:9606"
a 332 c 357 g 447
                                                                                                                                                                                                Score 956.8;
Pred. No. 8.4
                                           1099, 1566.
Location/Qualiflers
1, 1566
                                                                                                                                                                                                97.5%;
99.8%;
                 139.
                                                                                                                                                                                                Query Match
Best Local Similarity 99.8
Matches 958; Conservative
FT
mat_peptide
FT 3'UTR
                                                                                                                                                   ø
                                                                                                                                               430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               862
                                                                                   source
                                                                                                                                             BASE COUNT
ORIGIN
                                                                 FEATURES
                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                 ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E01816.1 GI:2170068

DP 1989020095-A/1.
Homo saplens (human)

ENAMARYOCA: TAMSAKIA. and Suda, M.
POLYPEPTIDE HAVING ANTI-BLOOD COAGULATING ACTION
NO POLYPEPTIDE HAVING ANTI-BLOOD COAGULATING ACTION

NO POLYPEPTIDE HAVING ANTI-BLOOD COAGULATING ACTION
NO Saplens (man)
PN 1989020095-A/1
PN 24-JAN-1989
PP 24-JAN-1989
PP 23-JUL-1987 JP 1987184428
PR 23-JUL-1987184428
PR 23-JUL-1987184428
PR 23-JUL-1987184428
PR 23-JUL-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SAINO SUKEYUKI, IWASAKI AKIO, SUDA MAKOTO
C12P21/02, C07K13/00, C12N15/00//A61K37/02, (C12P21/02,C12R1:19);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 29-SEP-1997
                                                                                                                                                                                                                                                                                                                                               848
               548
                                                                               809
                                                                                                              561
                                                                                                                                             999
                                                                                                                                                                                                             728
                                                                                                                                                                                                                                                681
                                                                                                                                                                                                                                                                                                              741
                                                                                                                                                                                                                                                                                                                                                                                                861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTTTTTCCATGATT 921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  981
                                                501
                                                                                                                                                                                621
                                                                                                                                                                                                                                                                                                                                                                                801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                              GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGCCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                              GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CDNA encoding human anticoagulant.
                                                                                                                                                                                                                                                                                                                                                                                                             849
                                                                            549
                                                                                                             502
                                                                                                                                             609
                                                                                                                                                                                                             699
                                                                                                                                                                                                                                                                             729
                                                                                                                                                                                                                                                                                                             682
                                                                                                                                                                                                                                                                                                                                             789
                                                                                                                                                                                                                                                                                                                                                                              742
                                                                                                                                                                                                                                                                                                                                                                                                                                             802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              862
                                              442
                                                                                                                                                                              262
                                                                                                                                                                                                                                              622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 15
E01816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
```

	TGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTTTTTT
	Ä
	£
_	Ă.
Ξ	Ę.
_	4
=	8
=	Ė
_	4
=	£
_	È
=	읽
=	ပ္
=	ប
=======================================	ğ
_	0
=	မ္က
_	Ĕ
Ξ	E
_	Ħ
_	3
_	¥
=	4
_	ŏ
=	£
_	Ė
=	5
=	4
_	ŏ
=	≨
_	<u>o</u>
=	æ
_	ည
=	2
Ξ	ပ္င
	Ą.
_	E
_	Ħ
_	976 CTGT
_	O
	9
	ō
	0
	ದ

ογ	922 AAGGGAGATACATCTGGGC	922 AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCCTCCGGAGAAGATGAC 981	AGAAGATGAC	981
DQ Q	1036 AAGGGAGATACATCTGGGC	1036 AAGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTGTGGAGAAGATGAC 1095	AGAAGATGAC	1095

Search completed: August 28, 2003, 18:14:03 Job time : 2604.33 secs

```
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
```

August 28, 2003, 15:43:40; Search time 2602.33 Seconds (without alignments) 15421.677 Million cell updates/sec 981 1 atggcatgtggcggtggcca......tgctctccggagaagatgac 5777422 Total number of hits satisfying chosen parameters: 2888711 segs, 20454813386 residues Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries - nucleic search, using sw model IDENTITY_NUC Gapop 10.0 , Gapext 1.0 length: 0 length: 2000000000 US-09-970-969-1 981 seq Title: Perfect score: Scoring table: Minimum DB : Maximum DB : OM nucleic Sequence: Searched: Run on:

Database

gb_ov:*
gb_pat:*
gb_ph:*
gb_pl:*
gb_ro:* em_hum:* em_in:* em_fun:* gb_sy:* gb_un:* gb_v1:* em_pat:* em_ph:* em_pl:* em_sts:* em_un:* em_v1:* em_ba:* em_mu:* em_om: * em_ro:* gb_htg:* gb_in:* em_ov: gb_om:* em or: the number of results predicted by chance to have a 5 Pred. No.

em_htgo_other:*

em_htgo_hum:* em_htgo_mus:*

em_htg_inv:* em_htg_other:*

em_htg_pln:* em_htg_rod:* em_htg_vrt:*

em_htg_mus:*

em_htg_hum:*

A13845 H. Saptence 12 A1345 H. Saptens P A01770 DNA sequence E14351 CDNA encodi 13341 Sequence 4 107344 Sequence 20 BC018671 Homo sapi D65423 Mouse mRNA AXX05384 Sequence U29396 Mus musculu M30971 Chicken and BC043882 Xenopus 1 D64134 Newt mRNA f A01772 DNA sequenc A01773 DNA sequenc A01774 DNA sequenc A1174 DNA sequenc X11253 O.latipes m M2248 Bovine mRNA D78778 Bovine mRNA AX178799 Danio rer M19384 Human place A01769 DNA sequenc 107345 Sequence 21 M18366 Human place 108832 Sequence 3 BC001429 Homo sapi AR262470 Sequence AR262471 Sequence A07367 M.musculus BC004993 Homo sapi BC012804 Homo sapi cDNA encodi DNA encodin Homo sapien BC003716 Mus muscu AX401930 Sequence M21730 Rat lipocor AF051895 Rattus no 133410 Sequence 2 M21731 Human lipoc J03745 Human endon AR262469 Sequence score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution. D00172 I33410 SUMMARIES AX401930 0 RATLC5 0 AF051895 CHKANCC2A BC043882 MMU29396 BC003716 **OLANNEXM2** AR262469 AR262470 AR262471 A07367 BC004993 BC012804 BC012822 HUMPAP4 BC001429 BOVENDNX MUSANXV BC018671 E01816 E03096 HUMBCI 133410 HUMLC5 HUMENN IO7181 A13845 A01770 E14351 A01773 A01774 I33411 I07344 **BTCHR4** 10 10 B 1480 1480 1522 1566 1566 1566 1567 1574 1592 1605 1619 Length Query 4446666 99466666 94466666 94466666 100.0 573 535.4 494.4 483 481.4 473.8 384.4 Score 999566 999566 999566 99956 999 958. 958. 956.

ALIGNMENTS

PAT 29-JAN-2003 (bases 1 to 981)
Tat: J.F. and Brown D.S.
Annexin derlutive with endogenous chelation sites
Patent: US 6323313-A 1 27-NOV-2001;
Location/Qualifiers linear DNA 981 bp Sequence 1 from patent US 6323313. AR262469 AR262469.1 GI:28073913 Unclassified. Unknown. RESULT 1 AR262469 LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS TITLE JOURNAL FEATURES

Qy 961 CTGCTCCGGAGAAGATGAC 981 	T 2 470 ITION SION ON RDS	SOURCE ORGANISM Unknown. Unclassified. REFERENCE 1 (bases 1 to 981)	Talt, J.k. an Annexin deri Patent: US 6	SOUTCE 1. 1941 Arganism="unknown"	Query Match 99.7%; Score 977.8; DB 6; Length 981; Best Local Similarity 99.8%; Pred. No. 4.6e-247; Matches 979; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	0y 1 ATGGCATGTGGCCATATGGCACAGTTCTCAGAGGCACTGTGACTGCTTCCT 60	OY 61 GGATTTGATGAGGGGGCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGGACA 120 	Oy 121 GATGAGGAGAGCATCCTGACTCTGTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATC 180	Oy 181 TCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTA 240 Db 181 TCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTA 240	OY 241 ACTGGAAAATTGAAAATTAATTGTGCCTCTGATGAAACCTCTCGGCTTTATGATGCT 300	Oy 301 IATGAACTGAAACATGCCTTGAAGGGGGGGCTGGGAACAAATGAAAAGTACTGACAGAAATT 360 	Oy 361 ATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATAT 420	QY 421 GGCTCAAGCCTGGAAGATGACGTGGGGGACACTTCAGGGTACTACCAGGGGATGTTG 480 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	OY 481 GTGGTTCTCCTTCAGGCTAACAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAA 540	OY 541 CAAGATGCTCAGGCTTTATTTCAGGCTGAGAACTTAAATGGGGACAGATGAAGAAAG 600 	Qy 601 TTTATCACCATCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTAC 660
source 1.981 "unknown" /organism="unknown" 286 a 187 c 251 g 257 t ORIGIN	Query Match 100.0%; Score 981; DB 6; Length 981; Best Local Similarity 100.0%; Pred. No. 6.6e-248; 6.6e-248; 0; Gaps 0; Matches 981; Conservative 0; Mismatches 0; 1ndels 0; Gaps 0; Qy 1 ATGGCATGTGGGGGTGGCCATATGGCAAGGTTCTCAGAGGCACTGTGACTTCCCT 60 1 ATGGCATGTGGCGGTGGCCATATGGCACAGGTTCTCAGAGGCACTGTGACTGAC	Oy 61 GGATTTGATGAGGGGGTGATGCAGAAACTCTTGGGAAGGGTATGAAAGGGTTGGGCACA 120 	OY 121 GAIGAGGAGGCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATC 180 III	Oy 181 TCTGCAGCTTTTAAGACTCTGTTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTA 240	Oy 241 ACTGGAAATTTGAAAATTAATTGTGGCTCTGATGAAACCTCTGGGCTTTATGATGCT 300	OY 301 TATGAACTGAAACATGCCTTGAAGGGACTGGAACAAATGAAAAGTACTGACAGAAAT 360 	Oy 361 ATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAATAT 420 	Qy 421 GGCTCAAGCCTGGAAGATGACGTGGGGGGACACTTCAGGGTACTACCAGGGATGTTG 480 LILILILILILILILILILILILILILILILILILILI	Qy 481 GTGGTTCTCCTTCAGGCTAACAGAGCCCTGATGCTGGAATTGATGAAGCTCAAGTTGAA 540 	Oy 541 CAAGATGCTCAGGCTTTATTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAG 600 	OY 601 TTTATCACCATCTTTGGAACACGAAGTGTCTCATTTGACAAAGGTGTTTGACAAGTAC 660 	Qy 661 ATGACTATATCAGGAITTCAAATTGAGGAAACCATTGACGCGGAGACTTCTGGCAATTTA 720 	OY 721 GAGCAACTACTCCTTGCTGTGAAATCTATTGGAAGTATACCTGCCTACCTTGCAGG 780 	Oy 781 ACCCTCPATTATCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATG 840	Qy 841 GTTTCCAGGAGTGAGTTGATCTGTTTAACATCAGGAAGGA	Oy 901 ACCTCTTTTATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTG 960

QY 361 ATTGCTTCAAGGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATAT	19 19 19 19 19 19 19 19	A81 GTGGTTCTTCAGGCTAACAGAGACCCIGATGCTGGAATTGATGAAGGTCAAGTTGAA A81 GTGGTTCTCTTCAGGCTAACAGAGAGATGATGAAGTTCAAGTTGAAGTTGAAGTTGAAGTTGAAGTTGAAGTTGAAGTTGAAGTTGAAGTTGAAGTTGAAGTTGAAGTTGAAGTTGAAGTTGAAGTTGAAGTTGAAGTTGAAGTTGAA	QY	Qy 601 TTTATCACCATCTTTGGAACACGAAGTGTGTCTCTTTGAGAAAGGTGTTTGAGAAAGGTGTTTGAGAAAGGTGTTTGAGAAAGGTGTTTGAGAAAGGTGTTTGAGAAAGGTGTTTGAGAAGTGTTTGAGAAAGGTGTTTGAGAAAGGTGTTTGAGAAAGGTGTTTGAGAAGGTGTTTGAGAAAGGTGTTTGAGAAGGTAGTA	Qy 661 ATGACTATATCAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTA 11111111111111111111111111111111	29-JAN-2003 OY	DD /81 ACCUCIATATATACATATAACAACTGGGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAAAAA	901	Qy 961 CTGCTCTCCGGAGAAGATGAC 981 	RESULT 4 A07367 LOCUS A07367	TCCT 60 FCCT 60	SOURCE SOURCE ORGANISM 111111 ORGANISM GCACA 120	REFERENCE 1 (base 180	1.1466 Source 1.1466 Source Academic Academ	CDS CDS CDS ATGCT 300 CDS ATGCT 300 ATGCT 300	
661 ATGACTATATCAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAAT 	721 GAGCAACTACTTGCTGTTGTGAAATCTATTGGAAGTATACCTGCCTACCTTGC 	781 ACCCTCTATTATGCTATGAAGGAGCTGGGACAGATGATCATACCCTCATCAGGG 	841 GTTTCCAGGAGTGAGATTGATCTGTTTAACATCAGGAAGGA	901 ACCICTCTITATTCCATGAITAAGGAGATACATCTGGGGACTATAAGAAAGCICTICTG 	961 CTGCTCTCCGGAGAAGATGAC 981 	from patent	Onknown. Unknown. Unknown. Unclassified.	1 (bases 1 to 984) Tait, Tr. and Brown, D. S. Annexin derivative with endogenous chelation sites Patent: US 6323313-A 5 27-NOV-2001;	Location/Qualiflers 1. 981 /organism="unknown" 286 a 187 c 250 g 258 t	Ouery Match Best Local Similarity 99.7%; Pred. No. 1.2e-246; Matches 978; Conservative 0; Mismatches 3; Indels 0;	1 ATGGCATGTGGCGGTGGCCATATGGCACAGGTTCTCAGAGGCACTGTGACTGAC	61 GGATTTGATGAGGGCTGATGCAGAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACA 	121 GATGAGGAGGCATCCTGATGACATCCCGAAGTAATGCTCAGCGCCAGGAAATC	181 TCTGCAGCTTTTAAGACTCTGTTTGGCAGGATCTCTGGATGACCTGAAATCAG 	241 ACTGGAAAATTGAAAAATTAATGTGGCTCTGATGAAACCCTCTCGGCTTAAGA 	

```
2 (bases 1 to 1536)
Strausberg, R.
                                                                                                                         Homo sapiens (human)
Homo sapiens
          GAGAAGATGAC 981
                    984 GAGAAGATGAC 994
                                                                                                                                                                                                                                                                                                                                                                 12477932
                                                                                                                MGC
          971
                                                                              DEFINITION
                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                              JOURNAL
MEDLINE
                                                                                                ACCESSION
                                                                                                      VERSION
KEYWORDS
SOURCE
                                                     RESULT 5
BC004993
                                                                                                                                                           REFERENCE
                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                 PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                    REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                              TITLE
          ö
                         a
RDPDAGIDEAQVEQDAQALFQAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISG
FQIEETIDRETSGNLEQLLLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSR
SEIDLFNIRKEFRRNFATSLYSMIKGDTSGDYKRALLLLCGEDD"
                                                                      ö
                                                                                                                                                                                                                                                                                                                                      490
                                                                                                                                                        GCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTT 190
                                                                                                                                                                                             250
                                                                                                                        AGCGGGCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGA 130
                                                                                                                                                                                                                                       443
                                                                                                                                                                                                                                                                                                                                                      503
                                                                                                                                                                                                                                                                                                                                                                        550
                                                                                                                                                                                                                                                                                                                                                                                         563
                                                                                                                                                                                                                                                                                                                                                                                                         610
                                                                                                                                                                                                                                                                                                                                                                                                                           623
                                                                                                                                                                                                                                                                                                                                                                                                                                            670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    850
                                                                                                                                                                                                             GGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCC 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGGATTTCAAATTGAGGAAACCATTGACGCGAGACTTCTGGCAATTTAGAGCAACTAC 730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          970
                                                                                                      83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AACATGCCTTGAAGGGAGCTGGAACAATGAAAAAGTACTGACAGAAATTATTGCTTCAA
                                                                                                                                                                                                                                                                                                             TGGAAGATGACGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCC
                                                                                                                                                                                                                                                                                                                                                                      TTCAGGCTAACAGAGCCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCTTCCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGGCCCTCTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGAGATTGATCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTGAAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                         AGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCA
                                                                       Gaps
                                                                     ö
                                                   Length 1466;
                                                                     8; Indels
                                                   Score 958.2; DB 6;
Pred. No. 6.8e-242;
                                                                     0; Mismatches
                         327 9
                                                  97.78;
                         291 c
                                                                    Matches 963; Conservative
                                                            Similarity
                         423
                                                   Query Match
                                                                                      7
                                                                                                                       71
                                                                                                                                       84
                                                                                                                                                                          144
                                                                                                                                                                                            191
                                                                                                                                                                                                                              251
                                                                                                                                                                                                                                               264
                                                                                                                                                                                                                                                                 311
                                                                                                                                                                                                                                                                                 324
                                                                                                                                                                                                                                                                                                   371
                                                                                                                                                                                                                                                                                                                   384
                                                                                                                                                                                                                                                                                                                                     431
                                                                                                                                                                                                                                                                                                                                                     444
                                                                                                                                                                                                                                                                                                                                                                       491
                                                                                                                                                                                                                                                                                                                                                                                       504
                                                                                                                                                                                                                                                                                                                                                                                                         551
                                                                                                                                                                                                                                                                                                                                                                                                                         564
                                                                                                                                                                                                                                                                                                                                                                                                                                            611
                                                                                                                                                                                                                                                                                                                                                                                                                                                            624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         911
                                                            Best Local
                         BASE COUNT
                                                                                                    셤
                                                                                                                                                                                                             8
                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                      ð
                                                                                                                       à
                                                                                                                                      g
                                                                                                                                                         ò
                                                                                                                                                                       a
                                                                                                                                                                                          δ
                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                ç
                                                                                                                                                                                                                                                                             임
                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
```

```
PORTIONAL CONTRICTOR OF A THE PROPERTY OF THE
```

ហ

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1. (Dases 1 to 1539)

2. Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G., Klausner, R.D., Collins, F.S., Wagner, L., Schamen, C.M., Schuler, G.D., Altschul, S.F., Zeeberg, B., Butcow, K.H., Schaefer, C.F., Bhat, N.K., Hopkins, R.F., Jordan, H., Moore, T., Ana, S.I., Wang, J., Hsieh, F., Diatchenko, L., Marusina, R., Farmer, A.A., Rubin, G.M., Hong, L., Staplecton, M., Soares, M.B., Bondo, M.F., Casavant, T.L., Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S. Carninci, P., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J., Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J., McKernan, K.J., Malek, J.A., Gunarane, P.H., Richards, S., Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W., Fahey, J., Helton, E., Ketteman, M., Green, E.D., Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y., Butterield, Y.S., Kazywinski, M., Salska, U., Shevchenko, Y. Butterield, Y.S., Kazywinski, M.I., Salska, U., Smallus, D.E., Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A. Gnera, M.A. Goneration and initial analysis of more than 15,000 full-length human and manne conversed.
                                                                                                                                                                                                                                                                                         1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BC012804 1 15339 bp mRNA linear PRI 06-JUN-2003
Homo saplens annexin A5, mRNA (cDNA clone MGC:2795 IMAGE:2961097),
complete cds.
BC012804 1 GI:15215411
                                                                                                                                                                                                                                                                                                                        730
                                                                                            832
                                                                                                                           790
                                                                                                                                                           892
                                                                                                                                                                                           850
                                                                                                                                                                                                                         952
                                                                                                                                                                                                                                                         910
                            772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Direct Submission
Submitted (15-AUG-2001) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                        791 ATGCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGA
                                                                                                                                                                                                             TCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATAT
                                                              CAGGATTTCAAATTGAGGAAACCATTGACGCGAGACTTCTGGCCAATTTAGAGCAACTAC
                                                                                                                            731 TCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGCCCTCTATT
                                                                                                                                               Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NIH-MGC Project URL: http://mgc.nci.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sedneuces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                human and mouse cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             to 1539)
                                                                                                                                                                                                                                                                                                                                                                                                                        1073 GAGAAGATGAC 1083
                                                                                                                                                                                                                                                                                                                                                                                          981
                                                                                                                                                                                                                                                                                                                                                                                          GAGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 (bases 1 t
Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12477932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22388257
                                                            671
                                                                                            773
                                                                                                                                                                                                                                                                                                                                                                                          971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 6
BC012804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                            g
                                                            Š
                                                                                      ద
                                                                                                                                                         셤
                                                                                                                                                                                           δ
                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                         ŏ
                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                  /codon_start=1
/product="annexin 5"
/product="AAH04993.1"
/product="AAH04993.1"
/db_xref="LocusID:308"
/db_xref="LocusID:308"
/db_xref="LocusID:308"
/translation="MaQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTS
RSNAQMQESISAAFTLFGROLLDDIKSELFOKFEKILTAMKRGLGTDEESILTLLTS
RSNAQMQESISAAFTLFGROLLDDIKSELFOKFEKILTAMKGLGTDEESILTLLTS
RSNAQMQESISAAFTLFGROLLDDIKSELFOKFEKILTS
AGTNEKVLTEIIASTPEELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQAN
RDPDAGIDEAQVEQDAQAELRAVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSR
SETILRINGREFRRATSLYSMIKGDTSGDYKKALLLLCGEDD"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGAAGATGACGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCC 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGACAGATGAAGAAAAGTTATCACCA 610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGAAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGATGCTTATGAACTGA 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACATGCCTTGAAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAA 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCGGTGGCCATATGGCACAGGTTCTCAGAGGCACTGTGACTTGCCTGGATTTTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCGGGCTGATGCAGAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCGGCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1536;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                       /clone="MGC:4402 IMAGE:2906015"
/tissue_type="Skin, melanotic melanoma."
/clone_lib="NIH_MGC_20"
/lab_host="DH10B-R"
/note="Vector: pOTB7"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 958.2; DB 9;
Pred. No. 6.8e-242;
0; Mismatches 8;
                                                                                                                                                                     /note="synonyms: ANX5, ENX2, PP4"
/db_xref="LocusID:308"
/db_xref="mIM:131230"
                                                                                                                                                                                                                                                                                                                                                                                                                        434 t
             sapiens"
          /organism="Homo sapien
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                      352 g
                                                                                                                                                         /gene="ANXA5"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97.78;
                                                                                                                                                                                                                         .1086
                                                                                                                                                                                                                                                                                                                                                                                                                        U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                          .1536
                                                                                                                                                                                                                                                                                                                                                                                                                        320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                      430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 963;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          653
                                                                                                                                                                                                                                                                                                                                                                                                                     BASE COUNT
ORIGIN
                                                                                                                                            gene
                                                                                                                                                                                                                         SGO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
```

ဖ

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Bukaryota; Mammalia; Eutheria; Primates; Catarrhin; Hominidae; Homo.

I (bases 1 to 1539)

Strausberg, R.L., Fefingold, E.A., Grouse, L.H., Derge, J.G., Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D., Altechul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K., Hopkins, R.F., Jordan, H., Mooret, T., Mang, J., Haieh, F., Diatchenko, L., Marusina, R., Farmer, A.A., Rubin, G.M., Hong, L., Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L., Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S., Scheetz, T.E., Prange, C., Raha, S.S., Loquellano, N.A., Peters, G.J., Abramson, R.D., Mullahy, S.J., Bosak, S.A., McEwan, P.J., McKernan, K.J., Male, K.J., A., Guaratne, P.H., Richards, S.W., Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lu, X., Gibbs, R.A., Fahey, J., Helton, E., Ketteman, M., Madan, A., Yould, S., Shevchenko, Y., Bouffard, G.G., Blakesley, R.W., Touchman, J.W., Green, E.D., Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1539 bp mRNA linear PRI 06-JUN-2003 annexin A5, mRNA (cDNA clone MGC:4465 IMAGE:2961097),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ٥.
                                                     490
                                                                                                                                                           655
                                                                                                                                                                                              610
                                                                                                                                                                                                                                                                   670
                                                                                                                                                                                                                                                                                                                                       730
                                                                                                                                                                                                                                                                                                                                                                         835
                                                                                                                                                                                                                                                                                                                                                                                                            790
                                                                                                                                                                                                                                                                                                                                                                                                                                               895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         910
                  535
                                                                                       595
                                                                                                                          550
                                                                                                                                                                                                                                715
                                                                                                                                                                                                                                                                                                    775
 911 ATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCG
                                                                        776 CAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCCAATTTAGAGCAACTAC
                                                                                                                          491 ITCAGGCTAACAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAAGATGCTC
                                                                                                                                                                                                  AGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCA
                                                                                                                                                                                                                     CAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         851 GTGAGATTGATCTGTTTAACATCAGGAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTT
                                                                                                                                                                                                                                                                     TCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATAT
                                                                                                                                                                                                                                                                                                                                                                                                                TCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    791 ATGCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BC012822
BC012822.1 GI:15215458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        971 GAGAAGATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo saptens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BC012822
                                                                                                                                                                                                                                                                     611
                                                                                                                                                                                                                                                                                                                                                                                                              731
                                                                                                                                                                                                551
                                                     431
                                                                                                                                                                                                                                                                                                                                         671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 7
BC012822
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                           셤
                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 음
                                                                                       g
                                                                                                                          ò
                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                           å
                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                           Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAL Plate: 2 Row: b Column: 4. Location/Qualifiers 1. 1539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /translation-"MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTS
RSNAQRQEISAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKG
AGTNEKVLTBIIASRTPEELRAIKOVYEEFGSSLEDDVYGDTSGYYORMLYVLLQAN
RDPPGGIDEAQVERQADAQALEKWTDEEKFTIFGTRSVSHLRKYFDKYMTISG
FQIEFIIDRFTSGNLAVYKSIRSIPATLATAMKGAGTDDHTLIRVWYSR
SEIDLFNIRKEFRKNFATSLYSMIKGDTSGDYKKALLLLCGEDD"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTGAAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGA 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AACATGCCTTGAAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAA 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCC 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11 GCGGTGGCCATATGGCACAGGTTCTCAGAGGCACTGTGACTTGCCTTCGCTTGGATTTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTTCTGCAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCEGECTGATGCACAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                CDNA Library Preparation: Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Institute for Systems Blology
http://www.systemsblology.org
contact: amadar@systemsblology.org
Anup Madan, Jessica Fahey, Erin Helton, Mark Ketteman, Anurack
Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1539;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                               /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="MGC:2795 IMAGE:2961097"
/tissue_type="Muscle, rhabdomyosarcoma"
/lab_host="DH10B-R"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 958.2; DB 9;
Pred. No. 6.8e-242;
O. Mismatches 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="synonyms: ANX5, ENX2, PP4'
/db_xref="LocusID:308"
/db_xref="MIM:131230"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /product="annexin 5"
/protein_id="AAH12804.1"
/db_xref="GI:15215412"
/db_xref="LocusID:308"
                                                                                                                                                                                                                                                                                    /organism-"Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                              /note="Vector: pOTB7"
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   355 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /codon_start-1
                                                                                                                                                                                                                                                                                                                                                                                                                                               /gene-"ANXA5"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97.78;
99.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   320 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            963; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                               1. .1539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S:
Matches 963,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CDS
                                                                                                                                                                                                                                                    FEATURES
 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

Fri

```
Human placenta anticoagulant protein PP4 mRNA, complete cds. M19384 J03264 M19384.1 GI:189614 H19384.1 GI:189614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              910
                                                                                                                   415
                                                                                                                                                  370
                                                                                                                                                                                                              430
                                                                                                                                                                                                                                                                        490
                                                                                                                                                                                                                                                                                                                                 550
                                                                                                                                                                                                                                                                                                                                                               655
                                                                                                                                                                                                                                                                                                                                                                                             610
                                                                                                                                                                                                                                                                                                                                                                                                                                                       730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      895
                                                                                          310
                                                                                                                                                                                                                                        535
                                                                                                                                                                                                                                                                                                    595
                                                                                                                                                                                                                                                                                                                                                                                                                         715
                                250
                                                            355
                                                                                                                                                                                AACATGCCTTGAAGGGAGCTGGAACAATGAAAAGTACTGACAGAAATTATTGCTTCAA 475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo. (bases 1 to 1582) Grundmann, U., Abel, K.J., Bohn, H., Lobermann, H., Lottspeich, F. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TIGAAAAATTAATIGIGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGA
                                                                                                                                                                                                                                                                                         791 ATGCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAGATTGATCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTTT
    GCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTT
                                                                                                                                                      AACATGCCTTGAAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAA
                                                                                                                                                                                                               GGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCC
                                                                                                                                                                                                                               TGGAAGATGACGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCC
                                                                                                                                                                                                                                                                                                                                   TTCAGGCTAACAGAGCCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTC
                                                                                                                                                                                                                                                                                                                                                                                              551 AGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCA
                                                                                                                                                                                                                                                                                                                                                                                                            CAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCTTGCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  anticoagulant protein; thromboplastin inhibitor.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGAAGATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kupper, H.
                                                                                                                                                                                  416
                                                                                                                                                                                                                                                                         431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1076
                               191
                                                            962
                                                                                          251
                                                                                                                      356
                                                                                                                                                      311
                                                                                                                                                                                                              371
                                                                                                                                                                                                                                          476
                                                                                                                                                                                                                                                                                                                                   491
                                                                                                                                                                                                                                                                                                                                                                 969
                                                                                                                                                                                                                                                                                                                                                                                                                         929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 8
HUMPAP4
LOCUS
                               à
                                                        a
                                                                                          ò
                                                                                                                   g
                                                                                                                                                  οχ
                                                                                                                                                                                g
                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                          Ω
                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /traislation-"MAQVLRGTVTDEPGFDERADAETLRKAMKGLGTDEESILTLLTS
RSNAQRQEISAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKG
AGTNEKVLTEITASRRPEELANIKOVYEEFGSSLEDDVYGDTSGYYGNLVVLLQAN
RDPDAGIDBOTDROYOQDAQALKGTDEEKTTIFGTRSVSHKVFDKYMTISG
FQIEFTIDRFSGVENGLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMYSR
SEIDLENIRKEFRKNFATSLYSMIKGDTSGDYKKALLLLCGEDD"
                                                                                                                                                                                                                                                                                                                                                                                             be found
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCATCCTGACTCTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTT 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        70
                                                                                                                                                                                                                                                                                                                                                                                          Clone distribution: MGC clone distribution information can be for through the I.M.A.G.E. Consortium/ALNL at: http://image.llnl.gov Series: IRAL Plate: 10 Row: k Column: 21. Location/Qualifiers
                                                                                                                                                    Health, Mammalian
Butterfield,Y.S., Krzywinski,M.I., Skalska,U., Smailus,D.E., Schnerch,A., Schein,J.E., Jones,S.J. and Marra,M.A. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences
Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002)
                                                                                                                                   Direct Submission
Submitted (15-ANG-2001) National Institutes of Health, Mammaliar
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                   Anuradha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                        Contact: MGC help desk
Email: cgapbs-rémail.nih.gov
Tissue Procurement: ATC
CDNA Library Preparation: Rubin Laboratory
CDNA Library Preparation: Rubin Laboratory
CDNA Library Arrayed by: The LIM.A.G.E. Consortium (LLNL)
DNA Sequencing by: Institute for Systems Biology
http://www.systemsbiology.org
contact: amadan@systemsbiology.org
contact: amadan@systemsbiology.org
Anup Madan, Jessica Fehsy, Erin Helton, Mark Retteman, Anurad
Madan, Stephanie Rodrigues, Amy Sanchez and Michelle Whiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 1539;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="MoC:4465 INAGE:2961097"
/tissue_type="Muscle, rhabdomyosarcoma"
/clone_lb="NHH_MGC_17"
/lab_host="DH10B-R"
/note="Vector: pOTB7"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PP4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 958.2; DB 9;
Pred. No. 6.8e-242;
0; Mismatches 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ENX2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /codon_start=1
/product="annexin 5"
/protein_id="AAH12822.1"
/db_xref="GI:15215459"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism-"Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="synonyms: ANX5,
/db_xref="LocusID:308"
/db_xref="MIM:131230"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /db_xref="LocusID:308"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               355 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /gene="ANXA5"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97.78;
99.28;
                                                                                                       (bases 1 to 1539)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 99.2
Matches 963; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .1539
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .1539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 320
                                                                                                                      Strausberg, R.
                                                                           22388257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BASE COUNT
ORIGIN
                                                           JOURNAL
MEDLINE
PUBMED
                                                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ses
                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                               TITLE
```

ð g ò g ò æ

```
1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /codon_start=1
/transl_table=11
/product=vascular anticoagulating protein"
/protein_id="canon193.1"
/db_xref="G1:410788"
/translation="MAQVLRGTVTDEPGFDERADAETLRKAMKGLGTDEESILTLLTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RSNAQRQEISAAFKTLEGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKG
AGTNEKVLTEIIASRTPEELRAIKQVYEEEYGSSLEDDVVGDTSGYYORMLVVLLQAN
RDPDAQIDEAGVEQDAQALPQAGELKMGTDEEKFITIFGTRSYSHLRRVFDKYWTISG
FQIEFIDIRETSGNLEQLLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVWVSR
SEIDLENIRKEFRATSLYSMIKGTTSGPKKALLLLCGEDD**
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              963 bp DNA linear PAT 01-SEP-1993 vascular anticoagulating protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
           619
                                                                                                 739
                                                                                                                                              670
                                                                                                                                                                                           799
                                                                                                                                                                                                                                      730
                                                                                                                                                                                                                                                                                     859
                                                                                                                                                                                                                                                                                                                                790
                                                                                                                                                                                                                                                                                                                                                                             919
                                                                                                                                                                                                                                                                                                                                                                                                                        850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     979
         620 TTCAGGCTAACAGAGCCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTC
                                                                           731 TCCTTGCTGTTGTGAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATT
                                                                                                                                                                                                                                                                                                                                                            791 ATGCTATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGAGATTGATCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTT
                                                      551 AGGCTTTATTTCAGGCTGGAGACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCA
                                                                                                                                                611 TCTTTGGAACACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATAT
                                                                                                                                                                                                                                        CAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            980 GTGAGATTTGTTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNAS WHICH CODE FOR THEM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 963;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97.5%; Score 956.8; DB 6;
99.8%; Pred. No. 1.6e-241;
11ve 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           construct"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VASCULAR ANTICOAGULANT PROTEINS, DNA
MANUFACTURE AND APPLICATION THEREOF
PATENT: WO 8807576-A 1 06-OCT-1988;
Location/Qualifiers
1.963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="synthetic con/mol_type="genomic DNA" /db_xref="taxon:32630" 1. 963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A01769
DNA sequence (gaa) for
A01769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 963)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A01769.1 GI:410787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              971 GAGAAGATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
Matches 958; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    285
                                                                                                                                                                                                                                        671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SBS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                 셤
                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                        ô
                                                                                                                                              ò
                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /tensialiation-imagolergyvepepgederadaeterkamkglgtdeesiltllts
rsnaqrqeisaafkylegrdliddikseltgreklivalmkpsrlydayelkhalkg
achekvletiasrppeelratkoyveegyseleddvgopsgyygrmyvlgan
Rdpdagideaqvalqaalkqaselkmytdeekfitpegyselkrykrwiisg
FQIEETIDRETSGNLEGLLAVVKSIRSIPAYLATHYAMKGAGTDDHTLIKVWVSK
Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family Proc. Natl. Acad. Sci. U.S.A. 85 (11), 3708-3712 (1988) 88234495 corpus the proceed of the proceed of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCGGCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGA 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              200 AGCGGCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGA 259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                260 GCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTT 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        251 TTGAAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGA 310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTT 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACATGCCTTGAAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAA 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCC 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11 GCGGTGGCCATATGGCACAGGTTCTCAGAGGCACTGTGACTGCACTTCCCTGGATTTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTCAGGCTAACAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGAAGATGACGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 :
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 97.7%; Score 958.2; DB 9; Length 1582; Best Local Similarity 99.2%; Pred. No. 6.8e-242; Matches 963; Conservative 0; Mismatches 8; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEIDLFNIRKEFRKNFATSLYSMIKGDTSGDYKKALLLLCGEDD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note="g in PP4-[14,26,48]; c in PP4-20"
/replace="c"
                                                                                                                                                                                                                                                                                                                                                                                                                                             /codon_start=1
/product=anticoagulant protein 4"
/protein_id="AAB5945.1"
/db_xref="GI:189615"
                                                                                                                                                                                                                                                                                                                           /clone="PP4-[14,20,26,48]."
/tissue_type="placenta"
<1. .1582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 449 t
                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                  /product="pp4 mRNA"
151, 1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               33 a 336 c 364 g
upstream of Smal site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        491
                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BASE COUNT
                                                                           MEDLINE
PUBMED
                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                               mRNA
                                                                                                                                                                                                              FEATURES
       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
```

for

and

ö

ö

Length 1432; Indels

. 9

Score 956.8; DB 6; Pred. No. 1.6e-241;); Mismatches 2;

; ;

97.58;

/organism="unknown' 276 c 323 ¤

120

141

9

180

201

240

261

300 381 360 441

321

Fri

```
CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                         AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                    GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                             ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                 Tile (bases 1 to 1432)

Wallner, B. P., Pepinsky, R. B. and Browning, J. i. Mallner, B. P., Pepinsky, R. B. and Browning, J. i. Sequences, recombinant DNA molecules an producing lipocortins III, IV, V & VI Patent: EP 0330396-A2 21 30-AUG-1989;

'Location/Qualifiers
'Location/Qualifiers
'Location/Qualifiers'
                                                                                                              Conservative
              Unclassified
                                                                                                        Best Local Similarity
Matches 958; Conserv
                                                                            Ø
Unknown.
Unknown.
                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                            22
                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                     382
                                                                                                                                                                                                                                                                                                                                 442
                                                                                                                                                                                                                                                                                                                                                              502
                                                                                                                                                                                                                                                                                                                                                                                         299
                                                                                                                                                         82
                                                                                                                                                                                     142
                                                                                                                                                                                                  121
                                                                                                                                                                                                                 202
                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                         322
                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                      622
                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                   682
                                                                                                                                                                      61
                                                                                                 Match
                                                                           BASE COUNT
ORIGIN
      ORGANISM
                           AUTHORS
TITLE
                    REFERENCE
                                                JOURNAL
                                                       FEATURES
                                                                                                 Query
                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                ŏ
                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                             ģ
                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ď
                                                                                                                             ö
                                                                                                                                          ద
                                                                                                                                                        ò
                                                                                                                                                                      셤
                                                                                                                                                                                     ò
                                                                                                                                                                                                 셤
                                                                                                                                                                                                                à
                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                        ò
                                                                                                                                                               360
                                                                                                                                                                                           420
                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                           099
                                                                                                                                                                                                                                                                                                                         741
                                                                                                                                                                                                                                                                                                                                        720
                                                                                                                                                                                                                                                                                                                                                     801
                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                  861
                                                                                                                                                                                                                                                                                                                                                                                                                                           981
                                                                           180
                                                                                                                                   300
                                                                                                                                                                                                                                      561
                                                                                                                                                                                                                                                                 621
                                                                                                                                                                                                                                                                                             681
                                                                                                                                                                                                                                                                                                                                                                                                               921
                                 141
                                                             201
                                                                                         261
                                                                                                                     321
                                                                                                                                                 381
                                                                                                                                                                                                         501
                  9
                                                                   CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                    GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                            CGAAGTGTCTCTCTTTGAGAAGGTCTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                         ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                               AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                        CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                            CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                         AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                            841
                 ч
                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                             622
                                                                                                                                                                                                                                                                                                                         582
                                                                                                                                                                                                                                                                                                                                      561
                                                                                                                                                                                                                                                                                                                                                     742
                                                                                                                                                                                                                                                                                                                                                                                  802
                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                               862
                                                                                                                                                                                                                                                                                                                                                                                                                                           922
     22
                                                            142
                                                                                        202
                                                                                                      181
                                                                                                                    262
                                                                                                                                 241
                                                                                                                                                322
                                                                                                                                                              301
                                                                                                                                                                            382
                                                                                                                                                                                          361
                                                                                                                                                                                                         442
                                                                                                                                                                                                                      $21
                                                                                                                                                                                                                                     502
                                                                                                                                                                                                                                                                 562
                                                                                                                                                                                                                                                                                                         501
                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                      g
                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                              $ 6 8
6 8
                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                        ŏ
                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                          6 6
                  쉽
                                          음
                                                                                                  셤
                                                                                                                   à
                                                                                                                              용
                                                                                                                                             ò
                                                                                                                                                           요. 장
                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                                ò
                                                            à
                                                                      a
                                                                                   ò
```

```
420
                                         480
                                                           561
                                                                            540
                                                                                             621
                                                                                                             600
                                                                                                                                681
                                                                                                                                                099
                                                                                                                                                                    741
                                                                                                                                                                                  720
                                                                                                                                                                                                     801
                                                                                                                                                                                                                        780
                                                                                                                                                                                                                                                        840
                        501
                                                                                                                                                                                                                                         861
                                                            CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                       CGAAGTGTGTCTCATTTGAGAAGGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                      GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
GTGGTGGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCCTTCAGGCTAAC
                                 CGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                       GIGAAAICTAITCGAAGIAIACCIGCCIACCIIGCAGAGACCCICIAITAIGCIAIGAAG
                                                                                                                                                                                   199
                                                                                                                                                                                                      742
                                                                                                                                                                                                                                         802
                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                       721
                                                                                                                                                                                  g
                                                                                                                                                                                                                      g
                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                         ò
```

02-DEC-1994

PAT

linear

1432 bp 1 EP 0330396.

from Patent GI:590053

21

107345 Sequence 2 107345 107345.1

RESULT 10 107345 LOCUS DEFINITION ACCESSION VERSION

CEYWORDS

	DD 373 GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC 432 GAGGGGGGACATCAAACAAGTTTATGAAGAAGATTTGGGAATTTGGGAATTTGGGGAATTTGGGGAATTTGGGGAATTTGGGGAATTTGGGGAATGTTGGTGG	0y 682 ATTGAGGAAACCATTGACGGCAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT 741 111111111111111111111111111111111111	1454 bp DNA linear equence 3 from Patent WO 8805659. 08832 08832. 08832. 08832.1 GI:588459 08832.1 GI:588459 08832.1 GI:588459 068883 lto 1454) 068883 lto 1454) 068883 lto 1454) 07888 lto 1454) 07888 lto 1454 07888 lto 14454 07888 lto 14454 07888 lto 14454 07888 lto 14454	Vuery Match Best Local Similarity 99:8%; Pool 1.6e-741; Matches 958; Conservative 0; Mismatches 2; Indels 0; Geps 0; Qy 22 ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGGGGGTGAT 81
Qy 862 CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT 921 Liliiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	z x	PUBMED 2964863 COMMENT Original source text: Human placenta, CDNA to mRNA, clones Location/Qualifiers Location/Qualifiers Location/Qualifiers Location/Qualifiers Location/Qualifiers Location/Qualifiers Location/Qualifiers Location/Qualifiers Anole="mRNA" Anole="mR	/product="anticoagulant" 421 a 280 c 325 g 418 t bp upstream of 281 site. 97.5%; Score 956.8; DB 9; Length 1444; 11arity 99.8%; Pred. No. 1.6e-241; Conservative 0; Mismatches 2; Indels 0; Gaps GGCACAGGTTCTCAGAGGCACTGACTTCCCTGGATTTGATGAGGGGCTGAT [

us-09-970-969-1.rge

```
/translation-"MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTS
RSNAQRQEISAAFKTLFGRDLLDDLKSELTGKFEKLIVALMRPSRLYDAYELKHALKG
AGNEKVLTEIIASKTPEELAIKOYVEEFGSELEDDVVGDTSGYYORMLVTLLQAN
RDPDAGIDEAQVEGDAQALFGAELKWGTDEEKFTTTFGTRSVSHLRKYFDKYMTISG
FQIEFTIDRETSGNLECLLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVWVSR
SEIDLFNIRKEFRKNFATSLYSMIKGDTSGDYKKALLLLCGEDD"
                                                                                                                                                                                                                                                                      web site:

Contact:

Contact:

Shevchenko, Y. Wetherby, K.D. Beckstrom-Sternberg, S.M.,

Benjamin, B. Blakesley, R.W., Bouffard, G.G., Brinkley, C., Brooks, S.,

Dietrich, N.L., Guan, X., Gupta, J., Ho, S.-L., Karlins, E., Legaspi, R.,

Lim, M., Maduro, Q.L., Masiello, C., Mastrian, S.D., McCloskey, J.C.,

McDowell, J., Pearsson, R., Snyder, B., Stantripop, S., Thomas, P.J.,

Zhang, L.-H. and Green, E.D.
                                                                                                                                                                                                                                                                                                                                                                                                                         found
                                                                                                                                                                                                                                                                                                                                                                                                                       Clone distribution: MGC clone distribution information can be fou through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAL Plate: 4 Row: o Column: 24
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA g1: 219480.
Location/Qualifiers
                Euteleostom1;
                                                                                 Submitted (12-DEC-2000) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                    Mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGTTGACATCCCGAAGTAATGCTCAGGGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGGGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                  cDNA Library Preparation: Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing Py: National Institutes of Health Intramural
Sequencing Center (NISC),
Gaithersburg, Maryland;
Web site:
nisc_mgc@nhgri.nih.gov/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                Craniata; Vertebrata; E
Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                      Direct Submission
Submitted (12-DEC-2000) National Institutes of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /db==rearon:9606"
/db==rearon:9606"
/clone="MGC:2201 IMAGE:3140878"
/tissue_type="0vary, adenocarcinoma"
/clone_lib="NIH_MGC_9"
                                                                                                                                          NIH-MGC Project URL: http://mgc.nci.nlh.gov
Context: MGC help desk
Emali: cgapbs-rémail.nih.gov
Tissue Procurement: DCTD/DTP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 956.8; DB 9;
Pred: No. 1.6e-241;
); Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /product-"annexin A5"
/protein_id-"AAH01429.1"
/db_xref="G1:12655149"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="LocusID:308"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="Vector: pOTB7"
               Chordata;
Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (bases 1 to 1538)
                Eukaryota, Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .1042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .1538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               928;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BASE COUNT
ORIGIN
   ORGANISM
                                                          AUTHORS
TITLE
                                           REFERENCE
                                                                                    JOURNAL
                                                                                                                                             REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-JUL-2001
mRNA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           732
                                                                                                                                                                                                                                                                                                      372
                                                                                                                                                                                                                                                                                                                                                                                                                       492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 981
                                          141
                                                                      132
                                                                                                                             192
                                                                                                                                                           261
                                                                                                                                                                                      252
                                                                                                                                                                                                                   321
                                                                                                                                                                                                                                                                                                                                    441
                                                                                                                                                                                                                                                                                                                                                                 432
                                                                                                                                                                                                                                                                                                                                                                                            501
                                                                                                                                                                                                                                                                                                                                                                                                                                                     561
                                                                                                201
                                                                                                                                                                                                                                                                           381
                                                                                                CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACTGAAACTTGCCTTG
                                                                                                                                                                                                                                                                                        CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGAGCTGGGACAGATGATCATACCCTCATCAGGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGAAACTCTTCGGAAGGCTATGAAAGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                               GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC
AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                            GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1538 bp mRNA. linear PRI , clone MGC:2261 IMAGE:3140878,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  annexin A5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GI:12655148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens, a complete cds.
BC001429
BC001429.1 GI:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BC001429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ношо
                                                                                                                                                                                                                                              253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  853
                                                                                                                                                                                                                                                                                                      313
                                                                                                                                                                                                                                                                                                                                                                                                                       433
                                                                                                                                                                                                                                                                                                                                                                                                                                                     202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       862
                                                                                                                                                                                                                 262
                                                                                                                                                                                                                                                                                                                                                                                          442
                                                                                                142
                                                                                                                             133
                                                                                                                                                                                     193
                                                                                                                                                                                                                                                                         322
                                                                                                                                                                                                                                                                                                                                  382
                                                                                                                                                                                                                                                                                                                                                               373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 13
BC001429
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                              윱
                                                                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                                                                                                                                                                                                                 õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         合
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ŏ
                                                                                               ð
                                                                                                                          g
                                                                                                                                                         å
                                                                                                                                                                                ដ
                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                 ò
                                          õ
```

ö

139 141 199 201

윱 å 셤 ô g

ò 셤 õ 음

셤

ŝ

g õ 셤 à ద ð ద

ð

```
/db_xref-"SWISS-PROT:P08758"

AD_XTETABLE LOOP-WAQUINGTOTPDEFEDERADAETLERANKGLGTDEESILTLLTG
RSWAGAGEISAAFE-LEGRDLLDDLKSELTGGFEKLIVALMKPSRLYDAYELKHALKG
AGTNEKVLTEIIASRTPEELRAIKQVYEEEYGSSLEDDVVGDTSGYYORMLVVLLQAN
RDPDAGIDEAQVEQDAQALEGAGELAVVKSTRSIPSGYORMLYVLLGAN
POLIEFILDREFSGNELAVVKSTRSIPAYLAETLYYAMKGATDDHTLIRVMYSR
SEIDLFNIRKEFRKNPATSLYSMIKGDTSGDYKKALLLLCGEDD
              2 (bases 1 to 1560)
Hauptmann, R.
Direct Submission
Submitted (15-AUG-1988) Hauptmann R., Ernst Boehringer Institut
fuer Arznelmittelforschung, Dr. Boehringer-Gasse 5/11, A-1121 Wien,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22 ATGCCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1560;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                              Hauptmann
                                                                                                                                                 /mol_type="mRNA"
/db_xref="txxn:9606"
/clone="lambda pl1/3 and others"
/tissue_type="placental"
124. .132
/note="Kozak consensus (tcgccatgg)"
129. .1091
                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AA)
                                                                                                                                                                                                                                                                                                                                                                                            186. .386
/note="structural repeat (67 AA)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97.5%; Score 956.8; DB 9; 99.8%; Pred. No. 1.6e-241;
                                                                                                                                                                                                                                            /note="VAC protein (AA 1-320)"
                                                                                           Data kindly reviewed (11-Nov-1988) by Location/Qualifiers
1. 1560
/organism="Homo_sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                              68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (67
                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="structural repeat (67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ų
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           879. .1079
/note="structural repeat
1539. .1544
                                                                                                                                                                                                                                                                                                                                                                                                                                                651. .854
/note="structural repeat
                                                                                                                                                                                                                                                                     /protein_id="CAA30985.1"
/db_xref="G1:37637"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 polyA signal"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          site"
357 g
                                                                                                                                                                                                                                                            /codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note="polyA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          330 c
                                                                                                                                                                                                                                                                                                                                                                                                                        . 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          958; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="p
1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           £
2455636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          429
                                                                                 Austria
                                                                                                                                                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                                                                                               misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                polyA_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              322
                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BASE COUNT
ORIGIN
               REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
  PUBMED
                                                                                                            FEATURES
                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ٠ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRI 12-SEP-1993
                                                                                                         379
                                                                                                                                                                                                                                                                                                                           619
                                                                                                                                                                                                                                                                                                                                                                              619
                                                                                                                                                                                                                                                                                                                                                                                                                                   739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                919
                                                                                                                                                               439
                                                                                                                                                                                                                    499
                                                                                                                                                                                                                                            501
                                                                                                                                                                                                                                                                     559
                                                                                                                                                                                                                                                                                                561
                                                                                                                                                                                                                                                                                                                                                    621
                                                                                                                                                                                                                                                                                                                                                                                                        681
                                                                                                                                                                                                                                                                                                                                                                                                                                                             741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              981
 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG . 259
                                                                                 321
                                                                                                                                    381
                                                                                                                                                                                         441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Craniata; Vertebrata; Euteleostomi;
Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Cranlata; Vertebrata; Euteleostomi; Mammalla; Eutherla; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1560)
Maurer-Fogy,I., Reutelingsperger,C.P., Pieters,J., Bodo,G., Stratowa,C. and Hauptmann,R.
Cloning and expression of cDNA for human vascular anticoagulant, ca2+-dependent phospholipid-binding protein
Eur. J. Blochem. 174 (4), 585-592 (1988)
                                                                                            GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                    AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                        GAACTGAGGCCATCAAACAAGTTTATGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                            GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                         CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                       CGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             922 AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein; vascular anticoagulant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1560 bp mRNi
mRNA for vascular anticoagulant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human mRNA for vascular X12454
X12454
X12454
Anospholipid-binding pi Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HSVAC
200
                          202
                                                    260
                                                                              262
                                                                                                         320
                                                                                                                                    322
                                                                                                                                                            380
                                                                                                                                                                                       382
                                                                                                                                                                                                                 440
                                                                                                                                                                                                                                            422
                                                                                                                                                                                                                                                                    200
                                                                                                                                                                                                                                                                                             502
                                                                                                                                                                                                                                                                                                                        260
                                                                                                                                                                                                                                                                                                                                                   262
                                                                                                                                                                                                                                                                                                                                                                            620
                                                                                                                                                                                                                                                                                                                                                                                                       622
                                                                                                                                                                                                                                                                                                                                                                                                                                989
                                                                                                                                                                                                                                                                                                                                                                                                                                                           682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HSVAC
```

g

à

g

à

8 ð a

à

ö

Gaps

188 141 248

81

368

321 428 381

201 308 261 488

ö

195

81

255

201

141

315

375

261

321 435 555

495 441

381

615

501

675

561

735

621

795 741 855

681

915

861

801

975

ò a ò a ð 8 ò 원 g

Š d ð

õ

셤 ð ò

g

셤

```
CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT 921
                        anticoagulant mature peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      262 ATTGTGGCTCTGATGAAGCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                         322 AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 682 ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGTTGACATCCCGAAGTAATGCTCAGGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                256 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                     GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                          616 AGAGACCCTGATGCTGGAATTGATGAAGGTGAACAAGATGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            502 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                    Gaps
                                                                                                                                                   ó
                                                                                                                                Length 1566;
   FI
   /product='human anticoagulant'
                                                                                                                                                   Indels
                                                                                                                              Score 956.8; DB 6;
Pred. No. 1.6e-241;
); Mismatches 2;
                       /product. human
                                                      1. .1566
/organism="Homo sapiens"
/organism="Homo sapiens"
/mol_type="genomic RNA"
/db_xref="taxon:9606"
a 332 c 357 g 447
                                                                                                447
                               Location/Qualifiers
1. .1566
             .1095
                                                                                                                                                  0;
                                                                                                                              Ouery Match
Best Local Similarity 99.8%;
Matches 958; Conservative
             139.
  FT
mat_peptide
FT 3'UTR
                                                                                                q
                                                                                                                                                                                                                                      196
                                                                                                                                                                                                                                                                                                                        316
                                                                                                                                                                                                                                                                                                                                                                  376
                                                                                                                                                                                                                                                                                                                                                                                                          436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            862
                                                                                                                                                                                                                  82
                                                                                                                                                                                                                                                            142
                                                                                                                                                                                                                                                                                                    202
                                                                                                                                                                                                                                                                                                                                                                                                                                382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       916
                                                      source
                                                                                                BASE COUNT
ORIGIN
                                            FEATURES
                                                                                                                                                                        ò
                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                           Qγ
                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                   Óγ
                                                                                                                                                                                                                                                                                                                    Dp
                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                     ٥y
                                                                                                                                                                                                                                                                                                                                                                                                                               οŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                         23-JUL-1987 JP 1987184428
20-FEBS-1987 JP 87P
37227
SAINO SUKETUKI, IWASAKI AKIO, SUDA MAKOTO
C12P21//02.C07K13/00.C12N15/00//A61K37/02.(C12P21/02.C12R1:19);
strandedness: Double;
                                                                                                                                                                                                                                                                                                                                             PAT 29-SEP-1997
                                                                                                                                                          848
                                                                                                                                                                                                                                                                     908
                                                                                                                                                                                                                                                                                                    909
                                                                      AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT 561
                                                                                                                   621
                                                                                                                             741
                                                                                                                                                                                                                                                801
                                                                                                                                                                                                                                                                                                                                   921
                                501
                                                                                                                                                                                                                                                                                          861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. (pase; I to 1566)
Saino,S., Iwasaki,A. and Suda,M.
POLYPEPTIDE HAVING ANTI-BLOOD COAGULATING ACTION
Patent: JP 1989020095-A 1 24-JAN-1989;
GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                  GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGCCCTCTATTATGCTATGAAG
                                                                                                                  CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                               GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                 CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTTATTCCATGATT
                                                                                                                                                                                                     ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                               GTGGTGGGGACACTTCAGGGTACTACCAGGGGATGTTGGTGGTTCTCCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                    RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tissue_type=placenta;
clone=pMKT7;
                                                                                                                                                                                                                                                                                                                                                                                                                                               cDNA encoding human anticoagulant.
E01816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .135
136. .1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (man)
JP 1989020095-A/1
24-JAN-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         topology: Linear;
hypothetical: No;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JP 1989020095-A/1.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GI:2170068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           anti-sense: No;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        *source:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  *source:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5'UTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 E01816.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1029
                                                                        502
                                                                                             609
                                                                                                                                       699
                                                                                                                                                                                729
                                                                                                                                                                                                                                                                                                                                  862
                               142
                                                  549
                                                                                                                   262
                                                                                                                                                            622
                                                                                                                                                                                                     682
                                                                                                                                                                                                                                               742
                                                                                                                                                                                                                                                                    849
                                                                                                                                                                                                                                                                                        802
                                                                                                                                                                                                                                                                                                            606
                                                                                                                                                                                                                                                                                                                                                      696
                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 15
E01816
LOCUS
LOCUS
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
```

1035	186	1095	
Db 976 CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGAT 1035	Qy 922 AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGAC 981	Db 1036 AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTGTGGAGAAGATGAC 1095	Search completed: August 28, 2003, 18:14:01 Job time : 2606.33 secs

```
BC032093 Homo sapi
BM464122 AGENCOURT
BX441583 BX441583
BX379189 BX379189
                                                                                       (without alignments)
14228.779 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                          August 28, 2003, 15:48:20 ; Search time 1675.67 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Description
                                                                                                                       US-09-970-969-1
981
1 atggcatgtggcggtggcca.....tgctctccggagaagatgac
                                                                                                                                                                                                                                          45562784
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                 22781392 segs, 12152238056 residues
                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUMMARIES
                                                                                                                                                                                                                                                                                                   Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BC032093
BM464122
BX441583
BX379189
                                                 OM nucleic - nucleic search, using sw model
                                                                                                                                                                           IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            em_gss_phg:*
em_gss_vrl:*
gb_gssl:*
gb_gss2:*
                                                                                                                                                                                                                                                                  Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    em_gss_pro:*
em_gss_rod:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gb_est4:*
gb_est5:*
em_estfun:*
em_estfon:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              em_gss_hum:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       em_gss_pln:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                em_gss_fun:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            em_gss_mam:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         em_gss_mus:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          em_gss_inv:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 em_gss_vrt:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1325
                                                                                                                                                                                                                                                                                                                                                                               em_esthum:
em_estin:*
em_estin:*
em_estip!:*
em_estip!:*
em_estip:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        %
Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gb_est2:*
gb_htc:*
                                                                                                                                                                                                                                                                                                                                                                    em_estba:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gb_est3:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gb_est1:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1602
1076
1071
1201
                                                                                                                                                                                                                                                                                                                                                        ESI: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97.7
89.1
88.5
87.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   115...
116...
117...
221...
224...
226...
296...
                                                                                                                           Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        958.2
874.4
868.6
858.4
                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                                 Searched:
                                                                                                                                                                                                                                                                                                                                                        Database
                                                                          Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Result
```

a

```
BM464122 1076 bp mRNA linear EST 05-FEB-2002
AGENCOURT_6445585 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:5540173
BM464122
                                                                                                                                                                        850
                                                                                                                                    983
                                                                  923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="Organ: skin; Vector: pCMV-SPORT6; Site_1: Not1; Site_2: Sal1; Cloned unidirectionally. Primer: Oligo dT. Average insert size 2 kb. Library constructed by Life
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chordata; Craniata; Vertebrata; Euteleostomi;
Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       L Unpublished
Contact: Robert Strausberg, Ph.D.
Email: cgapbs rfmail.nih.gov
Tissue Procurement: ATCC/DCTD/DTP
CDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium
Clone distribution: MGC clone distribution information
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAMI2235 row: n column: 14
High quality sequence stop: 708.
Localing/Qualifiers
 804 CAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCCAATTTAGAGCAACTAC
                                911 ATTCCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTTCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleoaton
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1076)
NHH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 12; Length 1076;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. 1076
/organism="Homo sapiens"
/organism="Homo sapiens"
/do_xref="taxon:9606"
/dlone="IMAGE:5540173"
/tissue_type="methonotic melanoma"
/lab_host="DH108 (phage-resistant)"
/clone_lib="NIH_MGC_72"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 874.4; DB 12;
Pred. No. 2.2e-223;
0; Mismatches 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 274 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 273 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BM464122.1 GI:18513164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Technologies.
229 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       89.1%;
96.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                              1104 GAGAAGATGAC 1114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match
Best Local Similarity 96.9
Matches 932; Conservative
                                                                                                                                                                                                                                                                                                                971 GAGAAGATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 2
BM464122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                  g
                                                                                                                                     d
                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                õ
                                                                                                       õ
                                                                                                                                                                          ç
                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                ç
                                                                                                       found
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCGGGCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGA 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGACACCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCC 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTAC 730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2
                                                                                                 Clone distribution: MGC clone distribution information can be for through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 26 Row: f Column: 11
This clone has the following problem: no 5' EST match.
Location/Qualifiers
                Contact: amg@bcm.tmc.edu
Gunaratne, P.H., Garcia, A.M., Lu, X., Hulyk, S.W., Hale, S.M.,
Yoon, V.S., Kowis, C.R., Lawrence, S., Martin, R.G., Muzny, D.M.
Richards, S., Gibbs, R.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11 GCGGTGGCCATATGGCACAGGTTCTCAGAGGCACTGTGACTGCCTTCCCTGGATTTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                251 TIGAAAAATTAATIGIGGCICTGATGAAACCCTCTCGGCTTIAIGATGCTTATGAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         431 TGGAAGATGACGTGGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTCAGGCTAACAGAGCCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AACATGCCTTGAAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1602;
                                                                                                                                                                                                                                                                                                                                                                                                                                    ô
                                                                                                                                                                                                     /organism-"Homo saplens"
//mol type="nRNA"
//db_xref="taxon:9606"
/clone="IMAGE:3924873"
/clone="IMAGE:3924873"
/clone=11b="NHL_MGC_72"
/lab_host="DH108"
                                                                                                                                                                                                                                                                                                                                                                                                                                    8; Indels
                                                                                                                                                                                                                                                                                                                                                                                               tch 97.7%; Score 958.2; DB 11; 11 Similarity 99.2%; Pred. No. 9e-246; 963; Conservative 0; Mismatches 8; 1
site: http://www.hgsc.bcm.tmc.edu/cdna/
                                                                                                                                                                                                                                                                                                                            /note="Vector: pCMV-SPORT6"
337 c 364 g 452 t
                                                                                                                                                                                        1. .1602
                                                                                                                                                                                                                                                                                                                                                449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              491
                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       671
                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local
Matches 96
                                                                                                                                                                                                                                                                                                                                             BASE COUNT
ORIGIN
                                                                                                                                                                        FEATURES
```

Q

ö 셤 ç 셤 å a ð 셤 ò

ò

쉽

ò 8 à g

g

à

g

ò 윱 à

ö

```
/organism="Homo sapiens"
/mol_type="mRNA"
/mol_type="mRNA"
/db_txfef="taxon:9606"
/clone="taxon:9608"
/tissue_type="FETAL BRAIN"
/tissue_type="FETAL BRAIN"
/dev_stage="fetal"
/clone_lib="Homo sapiens FETAL BRAIN"
/dote="forgan: brain; Vector: pcMvSpORT_6; lst strand cDNA
was primed with a NotI-oligo(dT) primer. Five prime end
enriched, double-strand cDNA was digested with Not I and
cloned into the Not I and EcoRV sites of the pcMvSpORT 6
vector. Library was not normalized."
31 a 229 c 274 g 272 t 5 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       70
                                                                                                                                          Contact: Genoscope
Genoscope - Centre National de Sequencage
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
BP 191 9106 EVRY cedex - CB 106 EVRY
BP 191 910 AB 191 910 EVRY
BP 191 910 BP 191 PV 191 910 EVRY
BP 191 910 BP 191 PV 191 910 EVRY
BP 191 910 BP 191 PV 1
                                                Euteleostomi;
                                                                                                                                                                                                                             For
                                                                                                                                                                                                                                                                            Contact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCGGTGGCCATATGGCACAGGTTCTCAGAGGCACTGTGACTGCCTTGCCTGGATTTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       131 GCATCCTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCCAGGAAATCTCTGCAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        251 TTGAAAATTAATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AACATGCCTTGAAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    71 AGCGGGCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1071;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                Catarrhini, Hominidae;
                                                Craniata; Vertebrata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 868.6; DB 13; Length
Pred. No. 8e-222;
1; Mismatches 11; Indels
                                          Eukaryota; Metazoa; Chordata; Craniata; Verti
Mammalia; Eutheria; Primates; Catarrhini; Hor
1 (bases 1 to 1071)
Lil,W.B., Gruber,C., Jessee,J. and Polayes,D.
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         88.5%;
98.6%;
                  sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                          1. .1071
                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Simi
Matches 874;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BASE COUNT
ORIGIN
                                ORGANISM
                                                                             REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BX441583 1071 bp mRNA linear EST 15-MAY-2003
BX441583 Homo sapiens FETAL BRAIN Homo sapiens cDNA clone
CSODPO19YK11 5-PRIME, mRNA sequence.
BX441583 GI:30775951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     381
                                                                                                                                                                                                                                                                                                                                            441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     944
                                                                                                                                             261
                                                                                                                                                                                                                                          404
                                                                                                                                                                                                                                                                                                          464
                                                                                                                                                                                                                                                                                                                                                                         524
                                                                                                                                                                                                                                                                                                                                                                                                           501
                                                                                                                                                                                                                                                                                                                                                                                                                                         584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        764
                                                                             201
                                                                                                          284
                                                                                                                                                                                                            321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                           GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                        CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTT-CCAGGAGTGAGATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTGTTTAACATCA-GGAAGGAGTTTAGGAAGAATTTTG-CCACCTCTCTTTATTCCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTAAGGGAGATACATCTGGGG - - ACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAG
                              TITGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTAGCAGAAATTTGAAAAATTA
                                                                                                                                                                                                            ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                            AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AT 1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AT 978
                                                                                                                                                                                                                                                                                                         405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  919
                                                                                                                                                                          285
                                                                                                                                                                                                          262
                                                                                                                                                                                                                                                                         322
                                                                                                                                                                                                                                                                                                                                         382
                                                                                                                                                                                                                                                                                                                                                                         165
                                                                                                                                                                                                                                                                                                                                                                                                                                      525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    861
                                                                                                                                          202
                                                                                                                                                                                                                                                                                                                                                                                                         142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     742
                                                                                                          225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        292
                                                                             42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 3
BX441583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Locus
                                        g
                                                                                                   셤
                                                                                                                                                                     a
                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                                                                                                õ
                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                õ
                                                                          οy
                                                                                                                                          ò
                                                                                                                                                                                                   ò
```

ö

Query Match Bost Local Similarity 94.9%; Pred. No. 4.7e-219; Matches 892; Conservative 15; Mismatches 27; Indels 6; Gaps	Qy 22 ATGGCACAGGTTCTCAGAGGCACTGACTGACTTCCCTGGATTGATGACGGGCTGAT 81	0y 82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGCATCCTGACT 141	OY 142 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAATCTCTGCAGCTTTTAAGACTCTG 201	Qy 202 TTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTAACT	OY 262 ATTGTGGCTCTGATGAAACCTCTCGGCTTTATGATGATGAACTGAAACATGCCTTG 321.	Qy 322 AAGGGAGCTGGAACAAATGAAAAGTACTGACAAAATTATGCTTCAAGGACACCTGAA 381	OY 382 GAACTGAGAGCCATCAAACATTATGAAGAATATGGCTCAAGCTGGAAGATGAC 441	Qy 442 GTGGTGGGGGACACTTCAGGGTACTACCGGATGTTGGTGGTGTTCTCTTCAGGCTAAC 501	0y 502 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT 561	Oy 562 CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA 621	Oy 622 CGAAGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA 681	Qy 682 ATTGAGGAAACCATTGACGGGACATTTTGGGCAATTTAGAGCAACTACTCTTGCTGTT 741	Qy 742 GTGAAATGTATTGGAAGTATACCTGCCTACCTTGCAGAGACCCTGTATTATGCTATGAAG 801 -	OY 802 GGAGCTGGGACAGATGATCATACCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT 861 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Qy 862 CTGTTTAACATCAGGAGGTTTAGGAAGAATTTTGCCACCTCTCTTATTCCATGATT 921	Oy . 922 AAGGGAGTACATCTGGGGACTATAAGAAAGCTCTTCTGC 961 	RESULT 5 BX417429 LOCUS BX417429 . 1201 bp mRNA linear EST 13-MAY-2003 DEFINITION BX417429 Homo sapiens PLACENTA Homo sapiens cDNA clone CSODE009Y116
491 TTCAGGCTAACAGAGCCCTGATGCTGGAATTGATGAAGCTCAAGTTGACAAGATGCTC 550 	551 AGGCTTTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCA 610 	TATAT	CAGGATTTCAAATTGAGGAAACCATTGACGGGGGACTTCTGGGAATTTAGAGGAACTAC 11+11+11+11+11+11+11+11+11+11+11+11+11+	TCCTTGCTGTTGTGAAATCTATTGGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATT 7 1 1 1 1 1 1 1 1 1	ATGCTATGAAGGAGCTGGGACAGATGATCATACCCCCTCATCAGGGAGTCATGCTTTCCAGGA B	GTGAGATTGATCTTTAACATCAGGAAGGAGTTTAGGAAGAATTT 896 GTGAGATTGATCTTTAACATCAGGAAGGAGTTTAGGAAGAATTT 1063	RESULT 4	LOCUS BX379189 LOCUS DEFINITION BX379189 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens CDNA CLORE CSODIO30YL18 5-PRIME, MRNA sequence.	ACCESSION BX379189 VERSION BX379189.1 GI:30446777 KEYWORDS EST. FOR SEQUENCE Home septems (human)			£	intitygen. Into sequence belongs to sequence cluster 2333.f FOI more information about this cluster, see http://www.genoscope.cns.fr/cgitseq-cg12seq-c	http://fu Faraday A ES	source /	/cione="CSULIDIATION" //tissue_type="PLACENTA COT 25-NORMALIZED" //clone_lib="Homo saplens PLACENTA COT 25-NORMALIZED" //note="list strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was	digested with Not I and cloned into the Not I and EcoR V sites of the pCMYSPORT 6 vector. Library was normalized." BASE COUNT 307 a 263 c 295 g 294 t 42 others ORIGIN

S

805

621

561

865

681

925

741

```
BX398791

BX398791 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens CDNA COT 25-NORMALIZED Homo sapiens CDNA CLORE CSODIO64YH19 5-PRIME, mRNA sequence.

BX398791

BX398791. GI:30613780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1046 CTGTTTA----MATCAGGAGGAGTTAGGGAGAATTTGCCACCTCTTTATTCATGATTA 1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Bmall: sequenceope.cns.fr. Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
more information about this cluster, see
http://www.genoscope.cns.fr/
egi-bin/cluster.cgl?seq-CS0D1064CD100Plscluster-2353.r. Contact:
Feng Library Enail: fliang@lifetech.com UKL:
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CSOD1064CD100Pl.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /clone="CSODIO64YH19"
/tissue_type="PLACENTA COT 25-NORMALIZED"
/clone_lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
/note="lst strand cDNA was primed with a Not1-ollgo(dT)
 686 AGAGACCCTGATGCTGGAATTGATGAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                            .
562 CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                     682 ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                         742 GIGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGCCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                   862 CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                                                                                                                            622 CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       922 AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGC 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mammalia, Eutheria; Primates; Catarrhini; Hon
1 (bases 1 to 996)
Lil,W.B., Gruber,C., Jessee,J. and Polayes,D.
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism~"Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 6
BX398791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                        δý
                                                                                           g
                                                                                                                                                                     g
                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                            ŏ
                                                                                                                                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                // Organism="Homo saplens"
// Mol_type="mRNA"
// Azref="Laxon:9606"
// Azref="Laxon:9606"
// Clone="CSDBE0097116"
// Lissue_type="PLACENTA"
// Clone_lib="Homo saplens PLACENTA"
// Note="Vector: pCWNSPORT_6: 1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and Ecorv sites of the pCMVSPORT 6 vector.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            442 GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCCTTCAGGCTAAC 501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81
                                                                                                                Euteleostomí;
                                                                                                                                                                                                                       Contact: Genoscope
Genoscope - Centre National de Sequencage
Br 191 91006 EVRY cedex - France
Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
more information about this cluster, see
                                                                                                                                                                                                                                                                                                                                                      http://www.genoscope.cns.fr/
cgi.bin/cluster=2353.r. Contact
cgi.bin/cluster.cgi?seq=CSODE009BE080Pl&cluster=2353.r. Contact
Feng Lidang Email: filang@lifetech.com URL:
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CSODE009BE08QPI.
Location/Qualliflers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7; Gaps
                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. I (bases 1 to 1201)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-length cDNA libraries and normalization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   87.2%; Score 855.2; DB 13; Length 1201; 95.0%; Pred. No. 3.4e-218; 1ve 10; Mismatches 30; Indels 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                39 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Library was not normalized.
260 c 297 g 295 t
                                  BX417429.1 GI:30654405
5-PRIME, mRNA sequence.
                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          893; Conservative
                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
Matches 893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BASE COUNT
ORIGIN
                 ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                               REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                           COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

ò

1045

921

861

985

```
142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    322
                                                                                                                                                                                                                                                                                                                                          BASE COUNT
ORIGIN
 LOCUS
                                                             ORGANISM
                                                                                       REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                   VERSION
KEYWORDS
SOURCE
                           ACCESSION
                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                               141
                                                                                                                                                                             300
                                                                                                                                                                                                                                  321
                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                              99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     741
                                                                                                                                                                                               261
                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                     381
                                                                                                                                                                                                                                                                                                        441
                                                                                                                                                                                                                                                                                                                                                                              561
                                                                                                                                                                                                                                                                                                                                                                                                               621
                                                                                                                                                                                                                                                                                                                                                                                                                                720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81
primer. Five prime end enriched; double-strand cDNA was digested with Not I and cloned into the Not I and EcoR v sites of the pcWYSPORT 6 vector. Library was normalized.

192 c 248 9 256 t 18 others
                                                                                                                                                                                             AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGCATCCTGACT
                                                                                                                                   CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                      AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                      ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                       GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                         GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTCGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                            AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                              CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAAATCTATTCGAAGTATACCTGCCTACCYTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . 1;
                                                     Length
                                                                       5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 851.6; DB 13;
Pred. No. 2.8e-217;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTG 898
                                                                     15; Mismatches
                                                    tch 86.8%; al Similarity 97.6%; 856; Conservative 1
                                                                                       55
                                                                                                                        83
                                                                                                                                          181
                                                                                                                                                            142
                                                                                                                                                                            241
                                                                                                                                                                                              202
                                                                                                                                                                                                                301
                                                                                                                                                                                                                                 262
                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                    322
                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                      382
                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                         442
                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                            502
                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                              562
                                                                                                                                                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                                                                                                                                 622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            862
                                                    Query Match
                                                             Best Local
                                                                    Matches
                          BASE COUNT
                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                        ۵
و
                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                       ð
                                                                                                       셤
                                                                                                                        õ
                                                                                                                                        g
                                                                                                                                                           ð
                                                                                                                                                                          g
                                                                                                                                                                                              ç
                                                                                                                                                                                                              g
                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                 õ
                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                             ç
                                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
```

RESULT 7 BX396240

```
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Bmail: seqrefdgenoscope.cns.fr, Neb: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq-ECOD1014AE05QPiscluster-2353.r. Contact :
Peng Liang Email: fliang@lifetech.com URL:
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CSOD1014AE05QPI.

1. .1062
BX396240 To aplens PLACENTA COT 25-NORMALIZED Homo sapiens CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                              Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTCACAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTGTGGCTCTGAAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1062)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                               Li,W.B., Gruber,C., Jessee,J. and Polayes,D. Full-length cDNA libraries and normalization Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 848.2; DB-13;
Pred. No. 2.4e-216;
1; Mismatches 4; I
                                   clone CSODIO14YIO9 5-PRIME, mRNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
                                                                       BX396240.1 GI:30624830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            86.5%;
llarity 99.4%;
Conservative
                                                                                                        Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                       Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 850; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
```

237 81

201 357

297

417 321

261

381 537

477

501

441 597 561 717 621 777 681 837

657

Fri

g ò 8 à g ö q ö 윱 õ 8 ö 윱 ð 셤

```
GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                                                  ATTGTGGCTCTGATGAAACCTCTCGGGCTTATGATGTTATGAACTGAAAATGCCTTG
                                                                                                                                                                                                                                                                                                                                              418 AFFGFGCTCTGATGAAACCTTCTCGGCTTTAWGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                             682 ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                        142 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                  GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      442 GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    502 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        838 ATTGAGG-AACCATTGACCGCGAGACTTCTGGCAATTTAGAGC-ACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         802 GGAGCTGGGACAGATGATCATACCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGGGGGGCTGAT
                                                                      Gaps
                                         Length 1201;
                                                                     .,
B
    others
                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGC 961
  38
                                           13;
                                         Score 839.6; DB 13. Pred. No. 5.2e-214;
    u
                                                                     Mismatches
  296
    5
  291
                                                                     Conservative 11;
                                         85.6%;
    Ü
  257
                                                      al Similarity
896; Conserv
  319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1073
                                                                                                22
                                                                                                                                                   82
                                                                                                                                                                              238
                                                                                                                                                                                                                                                                                                                    262
                                                                                                                                                                                                                                                                                                                                                                                                                                382
                                           Query Match
Best Local {
 BASE COUNT
ORIGIN
                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        q
                                                                                                                    g
                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              õ
                                                                                                ŏ
                                                                                                                                                    ö
                                                                                                                                                                             d
                                                                                                                                                                                                       ŏ
                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ΩŸ
                                                                                                                                                                                                                                                                                                                                              EST 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BX379218
BX379218 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens cDNA clone CSODIO31YA16 5-PRIME, MRNA sequence.
                           687
                                                        561
                                                                                  747
                                                                                                            621
                                                                                                                                      807
                                                                                                                                                                681
                                                                                                                                                                                           867
                                                                                                                                                                                                                      741
                                                                                                                                                                                                                                                927
                                                                                                                                                                                                                                                                            801
                                                                                                                                                                                                                                                                                                      987
                                                                                                                                                                                                                                                                                                                                GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT 861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /tissue_type="PLACENTA COT 25-NORMALIZED"
/clone_lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
/note="Ist strand cDNA was primed with a Noti-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was
digested with Not I and cloned into the Not I and ECOR V
sites of the pCMVSPORT 6 vector. Library was normalized."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (boses 1 to 1201)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     For
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact
                                                                                                                                                             AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                   CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                         GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                         GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            http://www.genoscope.cns.fr/
cg1.bin/cluster.cg1?seq-CSODIO31BA08QPlscluster=2353.r. Contac
Feng Liang Enail: filang@lifetech.com ORL:
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CSODIO31BA08QP1.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Emall: seqrefégenoscope.cns.fr. Web : www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r.
more information about this cluster, see
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /db_xref="taxon:9606"
/clone="CS0DI031YA16"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BX379218
BX379218.1 GI:30452736
                                                                                                                                                                                                                                                                                                                                                                                                      1048 CTGTATWACATCAGG 1062
                                                                                                                                                                                                                                                                                                                                                                                       CTGTTTAACATCAGG 876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ношо
                         628
                                                                                                                                                                                                                                                                                                                                802
                                                                                                                                                                                                                                                                                                                                                                                     862
                                                     502
                                                                                                          295
                                                                                                                                                                                                                                                                          742
442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION ·
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                      BX379218
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
```

741 895 955

861

921

Page

```
BX358605 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens CDNA colone CSODIO41XIO2 5-PRIME, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           561
                                                                                                                                                                       706
                                                                                                                                                                                                             621
                                                                                                                                                                                                                                                  766
                                                                                                                                                                                                                                                                                        680
                                                                                                                                                                                                                                                                                                                             826
                                                                                                                                                                                                                                                                                                                                                                   739
                                                                                                                                                                                                                                                                                                                                                                                                       886
                                                                                                                                                                                                                                                                                                                                                                                                                                            799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1076)
11, W.B., Gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA libraries and normalization
Unpublished
Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Bmail: sequencecope.ons.fr. web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
more information about this cluster, see
http://www.genoscope.cns.fr/
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CSOD1041BE01QP1scluster=2353.r. Contact :
Feng Liang Email: fliang@lifetech.com URL:
http://cluster.cgi?seq=CSOD1041BE01CP1scluster=2353.r. Contact :
http://cluster.cgi?seq=CSOD1041BE01CP1scluster=2353.r. Contact :
Feng Liang Email: fliang@lifetech.com URL:
http://cluster.cgi?seq=CSOD1041BE01CP1.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="texon:966"
/clone_type="PLACENTA COT 25-NORWALIZED"
/clone_lib="Homo sapiens PLACENTA COT 25-NORWALIZED"
/note="lst strand cDNA was primed with a NotI-oligo(dT)
                                                                                                                                                                                                                                                                                                                                                                                                                                          562 CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                   622 CGAAGTGTCTCA-TTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCA
                                                                                                                                                                                                                                                                                                              AATTGAGGAAACC - ATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTG
                                                                                                                                                                                                                                                                                                                                                                                         AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1007 ATCTGTTT-ACATCAGGAAGGRGTTTAGGAAGATTTTGSCACTCTCTTTAT 1056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTT 910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BX358605.1 GI:30382268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
Homo sapiens
                                                                                                                                                                           647
                                                                                                                                                                                                                                                                                                                                                                     681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  860
                     527
                                                           442
                                                                                              587
                                                                                                                                    502
                                                                                                                                                                                                                                                                                                                                                                                                         827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 10
BX358605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                           ò
                                                                                              셤
                                                                                                                                    ò
                                                                                                                                                                         g
                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
             AL542496 Homo saplens PLACENTA Homo saplens CDNA clone CSODE012Y114 5-PRIME, MRNA sequence.
AL542496.2 GI:30547699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="texon:9606"
/clone="CSODEDIY114"
/tissuc_type="PLACENTA"
/clone_lib="Homo sapiens PLACENTA"
/note="Vector: pCNVSPORTE, ist strand cDNA was primed
/note="vector: pCNVSPORTE, ist strand cDNA was primed
with a NotI-oligo(dT) primer. Five prime end enriched
double-strand cDNA was digested with Not I and cloned into
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATIGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAACAGCATGCCTTG 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              407 ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG 466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                  On Feb 15, 2001 this sequence version replaced gi:12874598.

Contact: Genoscope
Genoscope - Centrer National de Sequencage
BP 191 91006 EVRY cedex - France
Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
                                                                                                                                                                                                                                                                                                                                                                                                                                        http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq-cSODE012BE070P16cluster=2353.r. Contact
feng Liang Email : fliangelifetech.com URL :
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID : CSODE012BE070P1.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 142 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22 AFGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ë
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 1201;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      48 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                             1 (bases 1 to 1201)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-length cDNA libraries and normalization
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       85.5%; Score 838.4; DB 9;
98.2%; Pred. No. 1.1e-213;
11ve 3; Mismatches 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Library was not normalized."
243 c 293 g 307 t
                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               875; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local
                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BASE COUNT
ORIGIN
                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                      ORGANISM
                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
AL542496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
```

g ð

οy q ò g g

ò

d

ð 셤

ò

Fri

```
1029
                                                                                                    250
                                                                                                                                                                                                        430
                                                                                                                                                                                                                                         490
                                                                                                                                                                                                                                                                                                           610
                                                                                                                                                                                                                                                                                                                                             670
                                                                                                                                                                                                                                                                                                                                                                                                                790
                                                                                                                                                                       370
                                                                                                                                                                                                                                                                          550
                                                                                                                                                                                                                                                                                                                                                              561
                                                                                                                                                                                                                                                                                                                                                                              730
                                                                                                                                                                                                                                                                                                                                                                                               621
                                                                                                                                                                                                                                                                                                                                                                                                                                  681
                                                                                                                                                                                                                                                                                                                                                                                                                                                  849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    606
                                                                                                                     141
                                                                                                                                                      201
                                                                                                                                                                                        261
                                                                                                                                                                                                                         321
                                                                                                                                                                                                                                                          381
                                                                                                                                                                                                                                                                                           441
                                                                                                                                                                                                                                                                                                                            501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     801
primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and ECOR V sites of the DCNVSPORT 6 vector. Library was normalized. 233 c 274 g 278 t 4 others
                                                                                                                                                                                      ATGGCACAGGTTCTCAGAGGCACTGTGACTGCCTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                            GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                             CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                             ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                 GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                     AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                      CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                       CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                          GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTT
                                                 Score 835.8; DB 13; Length
Pred. No. 5.1e-213;
4; Mismatches 16; Indels
                                                 tch 85.2%;
al Similarity 97.4%;
866; Conservative
                         4
                         287
                                                                                                                                    251
                                                                                                                                                                     311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         862
                                                                                   22
                                                                                                                   82
                                                                                                                                                     142
                                                                                                                                                                                      202
                                                                                                                                                                                                       371
                                                                                                                                                                                                                                       131
                                                                                                                                                                                                                                                                         491
                                                                                                                                                                                                                                                                                          382
                                                                                                                                                                                                                                                                                                          551
                                                                                                                                                                                                                                                                                                                           442
                                                                                                                                                                                                                                                                                                                                                             502
                                                                                                                                                                                                                                                                                                                                                                             671
                                                                                                                                                                                                                                                                                                                                                                                               562
                                                                                                                                                                                                                                                                                                                                                                                                                                 622
                                                                                                                                                                                                                                                                                                                                                                                                                                                  791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     742
                                                                                                                                                                                                                       262
                                                                                                                                                                                                                                                        322
                                                                                                                                                                                                                                                                                                                                                                                                                731
                                                  Match
                                                          Local
                        BASE COUNT
ORIGIN
                                                                  Matches
                                                  Query
                                                                                   ð
                                                                                                  셤
                                                                                                                  ò
                                                                                                                                  a
                                                                                                                                                    ð
                                                                                                                                                                   윱
                                                                                                                                                                                      ð
                                                                                                                                                                                                     a
                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                       ŏ
                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                       გ
                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
```

iocation/Qualifiers

1. 1007
/organism="Homo sapiens"

(mol_type="mRNA"
/db_xref="taxon:9606"
/clone="CSDD1084YA05"
/clone="CSDD1084YA05"
/clone="Lb="Homo sapiens PLACENTA COT 25-NORMALIZED"
/clone_lb="Homo sapiens PLACENTA"
/clone_lb="Homo sapiens PLACENTA"
/clone_lb="Homo sapiens"
/clone_lb="Homo sapi ö EST 13-MAY-2003 141 290 201 350 261 410 321 470 381 530 590 OT 25-NORMALIZED Homo sapiens CDNA Genoscore - Centre National de Sequencage
Genoscore - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Bmall: seqreféquencocope.cns.fr, Web: www.genoscope.cns.fr
was normalized. Library was constructed by Life Technologies, a
division of Invitrogen. This sequence belongs to sequence cluster
1853.r For more information about this cluster, see
http://www.genoscope.ns.fr/
cgi-bin/cluster.cgi?seq=CSIAI0212G03QP1&cluster=2353.r. Contact :
frep://fulllength.invitrogen.com/ InvitroGen
Faraday Avenue Genoscope sequence ID : CSIAI0212G03QP1. 81 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases I to 1007)
1 (Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA libraries and normalization
Unpublished GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC ATGCCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT Gaps ö Length 1007 Indels Score 832.2; DB 13; Pred. No. 4.6e-212; 0; Mismatches 3; DX4UZ751 Homo sapiens PLACENTA COT 25-NORW CIONE CSODIO84YA05 5-PRIME, MRNA sequence. 1007 bp BX402751.1 GI:30607254 84.8%; 99.6%; Homo sapiens (human) Homo sapiens Contact: Genoscope 834; Conservative Similarity 277 Query Match Best Local S: Matches 834, 82 142 202 411 322 22 291 351 262 471 382 531 BASE COUNT ORIGIN DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS TITLE JOURNAL COMMENT FEATURES ò d à g οy g Óγ g ò g Qγ g ð g Page 10

, 9	7	1 7	1 7	1 7	1 7	1 7	1 ,	ч ~	1 2		1 9	r 9		1 4	1 21	Ŋ	03
atch	22 ATGCCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT 81	82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGCATCCTGACT 141	142 CTGTTGACATCCCGAAGTAATGCTCAGGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG 201 	202 TTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTAACT	262 ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG 321	322 AAGGGAGCTGGAACAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA 381 	382 GAACTGAGAGCCATCAAACAAGTTTATGAAGAATATGGCTCAAGCCTGGAAGATGAC 441 	442 GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTGTTCTCCTTCAGGCTAAC 501	502 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT 561	562 CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTTGGAACA 621 	622 CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA 691 	682 ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT 741	742 GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG 801	802 GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT 861	862 CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT 921 	922 AAGGGAGATACATCTGGGACTATAAGAAAGCTCTTCTGCTGCTCCTCCGGAGAAGATGA 980 ::	3 AL517516 AL517516 1201 bp mRNA linear EST 12-MAY-200 ON AL517516 Homo sapiens NEUROBLASTOMA Homo sapiens cDNA clone
Query M Best Lo Matches	Qy	oy Op	QY Db	Qy	Qy Db	Qy Dp	Qy	Oy Ob	oy ab	Qy	Qy Dp	Qy Db	Qy	Qy	Qy	Oy Db	RESULT 13 AL517516 LOCUS DEFINITION
442 GTGGTGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC 501 [502 AGAGACCCTGATGCTGGAATTGATGAAGCTCGAAGTTGAACAAGATGCTCAGGCTTTATTF 561	562 CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTTGGAACA 621 	622 CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA 681 	682 ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT 741 	742 GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGCCCTCTATTATGCTATGAG 801 	802 GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATT 858 	1264248	AL547761 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens CDNA CLONE CSODIO177J1 5-PRIME, mrNA sequence.	AL547761.2 GI:31269590 ALSON Sapiens (human) Homo sapiens	LUKATYOLS Metasods Chordata; Crantata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 1201) 5 Li,W.B. (Gruber.C., Jessee, J. and Polayes, D. 5 Li,W.B. (Annual Annual A	Tuti-Terupun Cowa Ilbrailes and normalization Unpublished On Feb 15, 2001 this sequence version replaced gi:12882128.	,	invisions. Into sequence belongs to sequence cluster 2353.r For more information about this cluster, see thttp://www.genoscope.cns.fr/ Types.com/orluster.gi/seq=cSODIO/TCD66P4scluster=2353.r. Contact:	http://fulllength.invitrogen.com/Inv		/tissue_type="PELACENTA COT 25-NORMALIZED" /tissue_type="PELACENTA COT 25-NORMALIZED" /clone_llb="Homo sapiens PLACENTA COT 25-NORMALIZED" /note="lst strand cDNA was primed with a NotI-oligo(dI) primer. Five prime end enriched double-strand cDNA was	311 8
Qy Dp	\$ B	Oy Dp	oy Op	oy Gp	o,	oy Op	RESULT 12 AL547761	DEFINITION	VERSION KEYWORDS SOURCE ORGANISM	REFERENCE AUTHORS	JOURNAL			FEATURES	á		BASE COUNT ORIGIN

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

E I (bases 1 to 1201)

E Li,W.B., Gruber.C., Jessee,J. and Polayes,D.

E Li,W.B., Gruber.C., Jessee,J. and Polayes,D.

I (pubblished

On Feb 15, 2001 this sequence version replaced gi:12872460.

Contact: Genoscope

Genoscope - Centre National de Sequencage

BP 191 91006 EVRX cedex - France

Email: seqref@genoscope.cns.fr, Web: www.genoscope.cns.fr

Library was constructed by Life Technologies, a division of

Invitrogen. This sequence belongs to sequence cluster 2353.r For
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AL541412 Homo sapiens PLACENTA Homo sapiens cDNA clone CSODE006FJ10 5-PRIME, mRNA sequence.
AL541412. GI:30545565
                                                                                                                                                                                                                                                                                                                                                                                                                                          http://www.genoscope.cns.fr/
cgi.bin/cluster.cgi?seq-CsODEO06DE05OP1&cluster-2353.r. Contact
Feng Liang Email : fliang@lifetech.com URL :
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID : CSODEO06DE05QP1.
                                                                                                                                                                                                                               ATTGAGGAAACCATTGACCGCGAGAGTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                          TCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGAT
                                                                                                                                       CGAAGTGTGTCTCATTTGAGAAGGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTA-TTATGCTATGAA
     GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                     GTGGTGGGGGACATTCAGGGTACTACCAGCGGATGTTGTGTTCTCCTTCAGGCTAAC
                                                                        AGAGACCCTGATGCTGGAATTGATGAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGC 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="mRNA"
/mol_type="taxon:9606"
/clone="cS0bE006xJ10"
/tissue_type="PLACENTA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo
   442
                                    624
                                                                      502
                                                                                                      684
                                                                                                                                                                                                                                                                                                                 864
                                                                                                                                                                                                                                                                                                                                                     742
                                                                                                                                                                                                                                                                                                                                                                                                                          801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 921
                                                                                                                                                                                                             622
                                                                                                                                                                                                                                                                                  682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 14
AL541412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                         ġ
                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                  g
                                                                    δ
                                                                                               q
                                                                                                                                       δ
                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                        ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /db_xref="taxon_9606"
/clone="CSODA003YF05"
/tlssue_Lyppe="NENFOBLASTONA"
/clone_lib="Homo sapiens NEUROBLASTOMA"
/clone_lib="town sapiens NEUROBLASTOMA"
/clone_lib="town sapiens NEUROBLASTOMA"
/note="vector: pcMvSPORT_6; lst strand cDNA was primed
/note="vector: pcMvSPORT_6; lst strand cDNA was primed
/note="vector: pcMvSPORT_6; lst strand cDNA was digested with Not I and cloned into
the Not I and ECRNY sites of the pcMvSPORT 6 vector.
Library was not normalized."
a 257 c 303 g 297 t 27 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Caterrhini; Hominidae; Homo.
1 (bases 1 to 1201)
11./W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-length cDNA libraries and normalization
Unpublished
                                                                                                                                                                                                                                       Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Indianation at the sequence belongs to sequence cluster 2353.r For more information about this cluster, see
http://www.genoscope.cns.fr/
cg1-bin/cluster.cg1?seq-CS0DA003CC03QP1&cluster-2353.r. Contact :
Frog Liang Email : fliang@lifetech.com UR. :
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID : CS0DA003CC03QP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGCCACAGGTTCTCAGAGGCACTGTGACTGCCTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                          On Feb 13, 2001 this sequence version replaced g1:12781009 Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 1201;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       40; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tch 84.5%; Score 828.6; DB 9 al Similarity 93.5%; Pred. No. 4.6e-211 880; Conservative 14; Mismatches 40
CS0DA003YF05 5-PRIME, mRNA sequence.
AL517516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="mRNA"
                                  AL517516.2 GI:30534896
                                                                    sapiens (human)
                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   317
                                                                    Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match
Best Local S.
Matches 880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       262
                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BASE COUNT
ORIGIN
                ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                       TITLE
JOURNAL
COMMENT
                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
```

860

928

Euteleostom1;

g1:12952676

```
/organism="Homo sapiens"
/mol_type="mRNA"
/do_tyref="mRNA"
/do_tyref="mRNA"
/dlone="CSODEGO04YD21"
/tissue_type="PLACENTA"
/clone_lib="Homo sapiens PLACENTA"
/clone_lib="Homo sapiens PLACENTA"
/note="Vector: pCMVSPORT_6; 1st strand CDNA was primed
/note="vector: pCMVSPORT_6; 1st strand cDNA was digested with Not I and cloned into
the Not I and ECORV sites of the pCMVSPORT 6 vector.
Library was not normalized." 5 others
                                                                                                                                        Homo sapiens cDNA clone CSODE004YD21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: sequef@genosope.cns.fr, Web : www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq-CSODE004CBI1QP16cluster=2353.r. Contact
Feng Liang Email : filang@lifetech.com URL :
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID : CSODE004CBI1QP1.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Craniata; Vertebrata; E
Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                  Feb 16, 2001 this sequence version replaced
                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 1022)
L1,W.B., Gruber, C., Jessee, J. and Polayes, D. Full-length cDNA libraries and normalization Unpublished
                                         1092 ATTAGGGGRATATCTGGGGABWWARAAAACCTTYTSYKC
      ATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                    On Feb 16, 2001 this sequence. Contact: Genoscope Genoscope - Centre National de Sequencage BP 191 91006 FVRY cedex - France BP 191 91006 FVRY CATA - France CATA - France CATA - FVRANCE 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 820.4; DB 9;
Pred. No. 6.7e-209;
5; Mismatches 1;
                                                                                                                                    1022 bp
ALS83578 Homo sapiens PLACENTA .
5-PRIME, mRNA sequence.
ALS83578
                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         'n.
                                                                                                                                                                                                                      AL583578.2 GI:30606551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    83.6%;
99.1%;
                                                                                                                                                                                                                                                             sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                    AL58357
                                                                                                                                                                                                                                                             Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           840;
                                                                                                                                                                                                                                           EST
    919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        262
                                                                                                                                          LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                   RESULT 15
AL583578
                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
/clone_lib="Homo sapiens PLACENTA" hote="Vector: pCMYSFORT_6" ist strand cDNA was primed with a NotI-ollgo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and Ecory sites of the pCMVSPORT 6 vector.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   918
                                                                                                                                                                                                                                                                                  315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         858
                                                                                                                                                                                                                                                                                                                                          141
                                                                                                                                                                                                                                                                                                                                                                                                                      201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAACTGAGAGCCATCAAACAAGTTTATGAAGAATATGGCTCAAGCCTGGAAGATGAC 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   561
                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                  GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGACATCCTGACT
                                                                                                                                                                                                                                                                                                                                                            ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AATTGAGGAAACCATTGACCGCGGAGACTT-CTGGCAATTTAGAGCAACTACTCGTTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGGAGCTGGGACAGATCATACCCTCATCAGAGTCATGG-TTTCCAGGAGTGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGGAGCTGGGACAGATGATACCCTCATCAGAGTYATGGTTTTCYAGGAGTGAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATG
                                                                                                                                                                                                                                                             ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                      ..
                                                                                                                                                                                 Length 1201;
                                                                                                                       others
                                                                                                                                                                                                                      Indels
                                                                                                                     38
                                                                                                                                                                                 Score 822; DB 9; I
Pred. No. 2.7e-209;
                                                                                                   was not normalized.
c 289 g 303 t
                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                      18;
                                                                                                                                                                               83.8%;
94.3%;
                                                                                                                                                                                                                        Conservative
                                                                                                   Library
256
                                                                                                                                                                                                    Similarity
                                                                                                                     315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9/9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             916
                                                                                                                                                                                 Match
                                                                                                                                                                                                                                                           22
                                                                                                                                                                                                                                                                                                                                        83
                                                                                                                                                                                                                                                                                                                                                                             256
                                                                                                                                                                                                                                                                                                                                                                                                                    142
                                                                                                                                                                                                                                                                                                                                                                                                                                                         316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         800
                                                                                                                                                                                                    Local
                                                                                                                     BASE COUNT
ORIGIN
                                                                                                                                                                               Query Ma
Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             음
                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                        å
                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
```

ä

Gaps

ä 1022;

Length Indels 235 141 295

91

355

261

321

```
622 CGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA 681
                                                                                                       741
                                                                                                                       441
                          595
                                                                     621
                                                                                           894
                 562 CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                      682 ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                           CTGTTTAM 1021
                                                                                                                                                         862 CTGTTTAA 869
                       셤
                                  ò
                                          셤
                                                 õ
                                                         a
                                                                    g g
                                                                                   ŏ
                                                                                           g
                                                                                                      ò
                                                                                                             g
                                                                                                                      õ
                                                                                                                               g
                                                                                                                                        ò
                                                                                                                                               q
```

Search completed: August 28, 2003, 19:38:11 Job time: 1681.67 secs

THIS PAGE BLANK (USPTO)

```
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
```

OM protein - protein search, using sw model	August 22, 2003, 21:27:21 ; Search time 37.6667 Seconds (without alignments) 1377.971 Million cell updates/sec
otein - protein	
M pro	Run on:
U	-4

US-09-970-969-2 1639 Title: Perfect score:

1 MACGGGHMAQVLRGTVTDFP.......KGDTSGDYKKALLLLSGEDD 327 Scoring table: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5

1107863 Total number of hits satisfying chosen parameters:

1107863 seqs, 158726573 residues

Searched:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

A_Geneseq_19Jun03:* Database :

/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1982.DaT:*
/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1983.DAT:*
/SIDS1/gcgdata/geneseqy/geneseqp-emb1/AA1984.DAT:*
/SIDS1/gcgdata/geneseqy/geneseqp-emb1/AA1985.DAT:*
/SIDS1/gcgdata/geneseqy/geneseqp-emb1/AA1987.DAT:*
/SIDS1/gcgdata/geneseqy/geneseqp-emb1/AA1987.DAT:*
/SIDS1/gcgdata/geneseqy/geneseqp-emb1/AA1987.DAT:*
/SIDS1/gcddata/geneseqy/geneseqp-emb1/AA1989.DAT:*
/SIDS1/gcddata/geneseqy/geneseqp-emb1/AA1989.DAT:*
/SIDS1/gcgdata/geneseqy/geneseqp-emb1/AA1989.DAT:* /SIDS1/gcgdata/geneseg/geneseqp-emb1/AA1991.DAT:*/SIDS1/gcgdata/geneseg/geneseqp-emb1/AA1992.DAT:*/SIDS1/gcgdata/geneseg/geneseqp-emb1/AA1993.DAT:*/SIDS1/gcgdata/geneseg/geneseqp-emb1/AA1993.DAT:*/SIDS1/gcgdata/geneseg/geneseqp-emb1/AA1994.DAT:* /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA2000.DAT:*/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA2001.DAT:*/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA2002.DAT:*/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA2002.DAT:*/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA2003.DAT:* /SIDS1/gcgdata/geneseq/geneseqp-emb1/aA1995.DAT:* /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1996.DAT:* /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1997.DAT:* /SIDS1/gcgdata/geneseq/genesegp-emb1/AA1998.DAT:*/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1999.DAT:* /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1980.DAT:* /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1981.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Description	Modified human ann	Modified human ann	Modified human ann	Placental coaqulat	Vascular anti-coad	PAP-I. Homo sapie	S65T GFP variant/h	Amino acid sequenc	Human annexin V, c
	ID	AAB50863	AAB50865	AAB50864	AAP80511	AAP91953	AAR13082	AAY13923	AAY84788	ABG31220
	90	22	22	22	σ	10	12	20	21	23
	Match Length DB ID	327	327	327	320	320	320	320	320	320
	Match	100.0	99.5	98.7	97.0	97.0	97.0	97.0	97.0	97.0
	Score	1639	1630	1618	1590	1590	1590	1590	1590	1590
4[000	NO.	-	7	m	₹	5	9	7	ထ	6

Novel modified annexin useful for imaging vascular thrombi and apoptosis, has N-terminal chelation site comprising amino acid

anticoagulant PP4 Annexin V/urokinas PAP-1 isolated fro CPB-1. Homo sapie Calphobindin I (CP Human CPB-1 protei Sequence vascular Sequence vascular	Vascular anticoagu CPP-1. Homo sapie Human lipocortin-V CPB-1. Homo sapie S65T GFP variant/h Wouse ischaentc co S65T GFP variant/h Rat annoxin-V. Ra	Human annexin V pr Modified annexin p Lung cancer associ Human placenta-der Human placenta-der Human placenta-der S65T GFP variant/h Human ovarian canc	Human cancer assoc Anticoagulative pp Anticoagulative pp Anticoagulative pp Novel human diagno Annexin XI type I Annexin XI type I Annexin XI type I Lung cancer associ Human polypeptide Sequence vassola Vascular anti-coag VAC-beta. Synthet Human protein SEQ
AAP90053 AAY92930 AAR92317 AAR26276 AAR41021 ABG32550 AAP80242 AAR90714	AAR11910 AAR26180 AAP91363 AAR25718 AAR13924 ABB7067 AAR13925 AAR75695	ABP56248 AABP56249 AABS333 AARS3725 AARS3726 AARS3726 AARS3726 AARS3726	AAB43617 AAP91913 AAY84790 ABG19948 AAR34127 AAR34128 AAY07117 ABP69394 AAP80715 AAP80715 AAP80715 AAP80715
10 11 11 13 14 14 14	2530110117 25301101177	222222222	100 100 100 100 100 100 100 100 100 100
320 318 318 318 318	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	319 669 208 672 675 786 321	322 322 322 322 322 322 322 322 322 322
96.99 96.79 96.77 96.77	. ₩ ₩ ₩ ₩ ₩ ₩ ₩	888.0 611.7 56.9 56.3 56.3	56.3 55.3 53.2 52.3 52.3 50.7 50.7 50.7
1587 1586 1586 1585 1585 1585 1584	1584 1584 1580 1553 1479.5 1479.5		923 906.5 906.5 872 865 857 857 831.5 831.5
100 110 110 110 110 110	11100000000000000000000000000000000000	333333333333333333333333333333333333333	33333333333333333333333333333333333333

ALIGNMENTS

Human; annexin; chelation site; nuclear imaging; apoptosis; transplant rejection. Modified human annexin, SEQ ID NO: 2. AAB50863 standard; Protein; 327 AA 25-MAY-2000; 2000WO-US14324. 990S-0324096 16-MAR-2001 (first entry) (UNIW) UNIV WASHINGTON WPI; 2001-080465/09. N-PSDB; AAC91368. Tait JF, Brown DS; WO20007332-A1 01-JUN-1999; Homo sapiens. 07-DEC-2000. AAB50863; RESULT 1

```
25-MAY-2000; 2000WO-US14324.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAB50864;
                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT
   g
                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                SAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEI 120
                                                                                                                                                                                                                                                                                           IASRTPEELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVE 180
                                                                                                                                                                                                                                                                                                                                                                     EQLLLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFA 300
                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                 9
                                              chelation site, which comprises an amino acid extension including a glycine and a cysteine residue. The modified annexin is useful for imaging vascular thrombior apoptosis which is associated with response to a chemotherapeutic agent or with rejection as a result of transplantation. The modified annexin can effectively chelate a radiouncilde and retain annexin bloactivity. It can be readily prepared in high radiochemical yield and with high radiochemical purity. In contrast to conventional conjugation chemistries that provide a distribution of conjugation products, the modified annexin has a single chelation site remote from the site of biological activity.
                                                                                                                                                                                                                           1 MACGGGHMAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEI
                                                                                                                                                                                                                                                                                                                                QDAQALFQAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNL
                                                                                                                                                                                              Gaps
                                      present sequence is a modified annexin having an N-terminal
                                                                                                                                                                                             ö
                                                                                                                                                                          Length 327;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; annexin; chelation site; nuclear imaging; apoptosis;
transplant rejection.
extension which comprises a glycine and a cysteine residue
                                                                                                                                                                                              Indels
                                                                                                                                                                         100.0%; Score 1639; DB 22;
100.0%; Pred. No. 1.1e-142;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                          TSLYSMIKGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                     Modified human annexin, SEQ ID NO: 6
                    Page 30-31; 39pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAB50865 standard; Protein; 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-MAY-2000; 2000WO-US14324
                                                                                                                                                                                   Local Similarity 100.
ses 327; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (UNIW ) UNIV WASHINGTON
                                                                                                                                                       327 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Brown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200073332-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-DEC-2000
                  Claim 12;
                                                                                                                                                         Sequence
                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                       19
                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                  191
                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAB50865,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rait JF,
                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB50865
ID AAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
g
                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                 쉽
                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                              ò
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                         to a chemotherapeutic agent or with rejection as a result of transplantation. The modified annexin can effectively chelate a radionuclide and retain annexin bloactivity. It can be readily prepared in high radiochemical yield and with high radiochemical purity. In contrast to conventional conjugation chemistries that provide a distribution of conjugation products, the modified annexin has a single chelation site remote from the site of biological activity.
                                                                                                                                                                                                                                                         The present sequence is a modified annexin having an N-terminal chelation site, which comprises an amino acid extension including a glycine and a cysteine residue. The modified annexin is useful for imaging vascular thrombi or apoptosis which is associated with response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MACGCGHMAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLTSRSNAQRQEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IASRTPEELRAIKOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EQLLLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QDAQALFQAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MACGGGHMAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                 Novel modified annexin useful for imaging vascular thrombi and apoptosis, has N-terminal chelation site comprising amino acid extension which comprises a glycine and a cysteine residue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 327;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; annexin; chelation site; nuclear imaging; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 1630; DB 22;
Pred. No. 7.7e-142;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TSLYSMIKGDISGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Modified human annexin, SEQ ID NO: 4.
                                                                                                                                                                                                   Claim 18; Page 37-38; 39pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAB50864 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         transplant rejection
WPI; 2001-080465/09.
N-PSDB; AAC91370.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 326; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                327 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO20007332-A1
```

m

```
320 AA;
                                                                                                                                                                                                  N-PSDB; AAN81113
            Homo sapiens
                             EP279459-A.
JP03219875-A
                                                                                 19-FEB-1988;
                                                                                                              23-JUL-1987;
                                                                                                      20-FEB-1987;
                                                             24 - AUG - 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   188
                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAP91953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAP91953
ID AAP9
XX
AC AAP9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 5
  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                         å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                              QDAQALFQAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNL 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 SAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEI 120
                                                                                                                                                                                                                                                                                                                                                                                                                                             IASRTPEELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVE 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EQLILLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFA 300
                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                            The present sequence is a modified annexin having an N-terminal chelation site, which comprises an amino acid extension including a glycine and a cysteine residue. The modified annexin is useful for imaging vascular thrombi or apoptosis which is associated with response to a chemotherapeutic agent or with rejection as a result of transplantation. The modified annexin can effectively chelate a radiounclide and retain annexin bloactivity. It can be readily prepared in high radiochemical yield and with high radiochemical purity. In contrast to conventional conjugation chemistries that provide a distribution of conjugation products, the modified annexin has a single chelation site remote from the site of biological activity.
                                                                                                                                                                                                                                                                                                                                                                     1 MACGGGHMAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEI
                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Placental coagulation inhibitor; disseminated vascular coagulation;
                                                                                                   Novel modified annexin useful for imaging vascular thrombl and apoptosis, has N-terminal chelation site comprising amino acid extension which comprises a glycine and a cysteine residue -
                                                                                                                                                                                                                                                                                                                                       ő
                                                                                                                                                                                                                                                                                                                 Length 327;
                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                Score 1618; DB 22;
Pred. No. 9.8e-141;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TSLYSMIKGDTSGDYKKALLLLSGEDD 327
                                                                                                                                           Claim 15; Page 33-35; 39pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAP80511 standard; protein; 320 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Placental coagulation inhibitor.
                                                                                                                                                                                                                                                                                                                98.78;
         99US-0324096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (updated)
(updated)
(first entry)
                                                                                                                                                                                                                                                                                                                         Best Local Similarity 99.4 Matches 325; Conservative
                           (UNIW ) UNIV WASHINGTON.
                                                                    WPI; 2001-080465/09
                                                  fait JF, Brown DS;
                                                                                                                                                                                                                                                                                           327 AA;
                                                                                N-PSDB; AAC91369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-MAR-2003
10-MAR-2003
12-NOV-1990
         01-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    thrombosis
                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAP80511;
                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAP80511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                   ç
                                                                                                                                                                                                                                                                                                                                                                                                                      윱
                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

```
240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                         This polypeptide exhibits strong anticoagulant activities and is useful for the treatment and prevention of e.g. thrombosis or disseminated intravascular coagulation in the brain, heart and peripheral blood vessels, such as cerebral and myocardial infarction. It has no antigenicity against man and can be produced in large amts. using recombinant methods.

(Updated on 10-MAR-2003 to add missing OS field.)
(Updated on 25-MAR-2003 to correct PF field.)
(Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                        Recombinant placental coagulation inhibitor - useful for the prevention and treatment of thromboses or disseminated intra-vascular coagulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               68 FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 MAQVLRGTVTDPPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97.0%; Score 1590; DB 9; 99.7%; Pred. No. 3.6e-138;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ¥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301 KGDTSGDYKKALLLCGEDD 320
                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 7; ?pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAP91953 standard; protein; 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KGDTSGDYKKALLLLSGEDD
                                                                                                                                            Σ
88EP-0102468
                                       87JP-0037227
                                                           87JP-0184428
                                                                                                                                               Suda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match
Best Local Similarity 99.7
Matches 319; Conservative
                                                                                                                                            Saino Y, Iwasaki A,
                                                                                                                                                                                      WPI; 1988-236733/34.
WPI; 1991-329110/45.
                                                                                                     (KOWA ) KOWA CO LID
```

ö

K; PBP;

```
61 FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          128 ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This sequence, or a fragment of it, is used in the construction of hybrid phospholipid-binding proteins (PBD) comprising at least one lipocortin phopholipid binding domain (PBD), e.g. of pAP-1, joined to a gla-domainless vitamin K-dependent protein, e.g. protein C or activated protein C. See AAQ12680-81 for such examples. See also AAQ12678-81.
(Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Recombinant prodn. of hybrid phospholipid-binding proteins comprising lipocortin phospholipid-binding domain and vitamin K-dependent protein
                                                                                                                                                                                                                                                              Phopholipid; binding protein; lipocortin; domain; vitamin gla-domain; VKDP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 1590; DB 12;
Pred. No. 3.6e-138;
0; Mismatches 1;
                                                                                                                  Ş
                       301 KGDTSGDYKKALLLCGEDD 320
   KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Fig 7; 57pp; English.
                                                                                                                  AAR13082 standard; Protein; 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 99.7%;
Matches 319; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                         90WO-US07335.
                                                                                                                                                                                                                                                                                                                                                                                                                                         89US-0459082
                                                                                                                                                                                (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (2YMO ) ZYMOGENETICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1991-222905/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                320 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N-PSDB; AAQ12679
                                                                                                                                                                                                                                                                                                              Homo saptens,
                                                                                                                                                                                                                                                                                                                                                                                                         13-DEC-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                        29-DEC-1989;
                                                                                                                                                                                                                                                                                                                                           WO9109953-A.
                                                                                                                                                                                25-MAR-2003
30-SEP-1991
                                                                                                                                                                                                                                                                                                                                                                         11-JUL-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Foster DC;
     308
                                                                                                                                                AAR13082;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                               PAP-I.
                                                                                RESULT 6
     ò
                                 셤
                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This vascular anti-coagulating protein (VAC)-alpha is used in the preparation of monoclonal antibodies (MADs). The VAC-alpha is injected into a host animal, in conjugation with eak perplet hamocyanin, and the B-cells from immunised hosts are then fused with myoloma calls. The resultant hybridomas (VAA-8 and VAA-9) produce Abs specific to VAC-alpha. Abs can be used as immunossay reagents to detect VAC proteins, as affinity ligands for protein purificm, and as medicaments for binding and/or neutralising VAC proteins in vivo. See also AAN91354 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                              Vascular anti-coagulating proteins; hybridomas; B-cells; myelomas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        - and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Monoclonal antibodies to vascular anti-coagulating proteins hybridomas producing such antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (Updated on 10-MAR-2003 to add missing OS fleld.) (Updated on 25-MAR-2003 to correct PA fleld.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 1590; DB 10;
Pred. No. 3.6e-138;
0; Mismatches 1;
                                                                                                                                                                                              1..320
/product=VAC-alpha protein
                                                               Vascular anti-coagulating protein-alpha.
                                                                                                                                                                               Location/Qualiflers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; fig 1; 11pp; German
                                                                                                                                                                                                                                                                                                                                                                        (BOEH ) BOEHRINGER INGELHEIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97.0%;
99.7%;
                                                                                                                                                                                                                                                                                                                                         88DE-3810331
                                                                                                                                                                                                                                                                                                           88DE-3810331
                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 319; Conservative
                                                                                                                               - Homo sapiens
- Mus musculus
 (updated)
(updated)
                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1989-293724/41.
N-PSDB; AAN91353.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             320 AA;
25-MAR-2003
10-MAR-2003
30-JUL-1989
                                                                                                                                                                                                                                                                                                           26-MAR-1988;
                                                                                                                                                                                                                                                                                                                                         26-MAR-1988;
                                                                                                                                                                                                                                             DE3810331-A.
                                                                                                                                                                                                                                                                           05-OCT-1989
                                                                                                                                                                                                                                                                                                                                                                                                        Gunther A;
                                                                                                                              Chimeric
Chimeric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EP-181465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
```

ö .

Gaps

ö

g ç

ô 셤 õ g ô 셤 ö 음

67

187 180

127 9

FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE

89

```
g
                                                                                                                                                                                                                                                                                  g
                                                                                                                                                       셤
                                                                                                                                                                                                                                                     õ
                             d
                                                            ò
                                                                                           셤
                                                                                                                          ŏ
                                                                                                                                                                                        ά
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This sequence represents an example of a protein of the invention.

The proteins are bifunctional Aequorea victoria green fluorescent protein conference of the proteins are bifunctional Aequorea victoria green fluorescent proteins.

GFP)-annexin fusion proteins, where the GFP and annexin moleties provide greater or equal fluorescent intensity and anionic phospholipid binding affinity, respectively, than do the corresponding unfused GFP and annexin proteins. An early manifestation of apoptosis is the loss of the proteins. An early manifestation of apoptosis is the loss of the plasma membrane phospholipids on the extracellular leaflet of the capasure of anionic phospholipids on the extracellular leaflet of the glasma membrane. The GFP-annexin V fusion proteins are used for the detection of apoptotic cells by flow cytometry or fluorescent microscopy. The fusion proteins provide for homogeneously labelled annexin, with fluorescence properties that do not change upon binding membrane phospholipid of FIFC-annexin V fluorescence by 40-50% occurs upon binding phospholipid
248 VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 307
             GFP; green fluorescent protein; annexin; fusion protein; apoptosis; fluorescent intensity; anionic phospholipid binding affinity; asymmetric distribution; plasma membrane phospholipid; apoptotic cell detection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bifunctional fusion protein useful for the detection of apoptotic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 1590; DB 20;
Pred. No. 3.6e-138;
); Mismatches 1;
                                                                                                                                                                                                                                                              S65T GFP variant/hAnnexin V protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 2; Page 14-15; 23pp; English,
                                                                                                                                                                      AAY13923 standard; protein; 320 AA
                                                          KGDTSGDYKKALLLLSGEDD 327
                                                                            97.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98WO-US21444.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       970S-0948276
                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (REGC ) UNIV CALIFORNIA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-277634/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                320 AA;
                                                                                                                                                                                                                                                                                                                                                                                 Aequorea victoria
                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                          WO9919470-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-OCT-1997;
                                                                                                                                                                                                                                   13-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   membranes
                                                                                                                                                                                                     AAY13923;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ernst JD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                            308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
                                                                                                                                       RESULT 7
                                                                                                                                                         AAY 13923
                             셤
                                                            ò
```

```
120
                                                                    180
                                                                                                  247
                                                                                                                                                         187
                                                                                                                                                                                                                                                                                                                                                                                                                                              Annexin; phospholipid; antithrombotic; antitumor; antinflammatory; coating; thrombogenic biomaterial; labelling compound; negative charge.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    chemical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present sequence represents an annexin polypeptide. The domain of annexin, which may be modified, is used to construct the chemical compounds of the invention. The specification describes chemical compounds which have an affinity for a phospholipid. The chemical residues supporting as test one chemical functions that are capable of binding to the phospholipid and at least partly define the affinity of the structure for the phospholipid. The compounds act as phospholipid as equesters. The compounds are useful for preparing antithrombotic, antitumor and antiinflammatory medicaments, for making coatings for thrombogenic biomaterials, and for preparing labelling compounds useful for analysing and detecting negative
ELRA I KOVY EEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAG I DEAQVEQDAQALF
                                                        Chemical structure having affinity for phospholipid comprises chemica) platform comprising six residues supporting set of chemical functions that are capable of binding to phospholipid -
                                                                                                   QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Guerois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cordier OF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATOMIQUE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualiflers
16..91
                                                                                                                                                                                                                                                                                                                          AAY84788 standard; peptide; 320 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (COMS ) COMMISSARIAT ENERGIE ATOMI
(UYPA-) UNIV CURIE PARIS VI P & M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note- "domain 1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Neumann JM,
                                                                                                                                                                                                                                                KGDTSGDYKKALLLLCGEDD 320
                                                                                                                                                                                                                                                                                                                                                                                                                   Amino acid sequence of annexin V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 13; Fig 6b; 63pp; French.
                                                                                                                                                                                                                      KGDTSGDYKKALLLLSGEDD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98FR-0012366.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98FR-0012366.
                                                                                                                                                                                                                                                                                                                                                                                      08-AUG-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rosso MF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-320664/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FR2784106-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        02-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sanson A,
                                                                                                                                                                                                                     308
                                                                    121
                                                                                                                                                                                                                                                301
                                         128
                                                                                                                                                                                                                                                                                                                                                       AAY84788;
                                                                                                  188
          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Doma in
                                                                                                                                                                                                                                                                                              RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Key
```

ö

ö

Indels

ö

Conservative

319;

Best Loca Matches

ò 셤

Similarity

deltaV1-5 or their

```
pseudo-delta receptors for activated C-kinase (RACK),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   88EP-0118039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       87DE-3737239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           anticoagulant PP4 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human).
                                                                                                                                                                                                    ¥.
                                                                                                                                                                                                   320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-OCT-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-NOV-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-MAR-2003
01-NOV-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-JUN-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EP318703-A
                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAP90053;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAP90053
  셤
                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         127
                                                                                                                                      187
                                                                                                                                                                                                            247
                                                                                                                                                                                                                                                   VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 307
                                                                                                                                                                                                                                                              29
                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   damage to
by stroke,
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; annexin V; delta RACK; delta protein kinase C; deltaPKC; VI domain; vasotropic; cerebroprotective; deltaV1-1; deltaV1-2; RACK; pseudo-delta receptor for activated C-kinase; deltaV1-5; PKC; protein kinase C; signal transduction; cell growth; gene expression; ion channel activity; translocation; hypoxia; stroke; ischaemic damage; creatine kinase.
                                                                                                                                                                                                                       181 QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                     1 MAQVLRGTVTDFPGFPDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                  ELRAIKQVY EEEYGSSLEDDVVGDTSGY YQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                  MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                          FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEITASRTPE
                                                                                                                                                                                                           QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention discloses peptides comprising deltav1-1, deltav1-2,
                                                              ö
                                          Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New delta protein kinase C peptide for reducing or enhancing cells or tissues exposed to ischemic or hypoxic event caused or for protecting tissue from damage due to ischemia -
                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                 Human annexin V, containing a delta RACK binding site.
charges on cell surfaces and microvesicles in blood.
                                    Score 1590; DB 21;
Pred. No. 3.6e-138;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 45; Page 64-65; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (STRD ) UNIV LELAND STANFORD JUNIOR
                                                                                                                                                                                                                                                                                                                                                                    ABG31220 standard; Protein; 320 AA.
                                                                                                                                                                                                                                                                                                       301 KGDTSGDYKKALLLLCGEDD 320.
                                                                                                                                                                                                                                                                                            308 KGDTSGDYKKALLLLSGEDD 327
                                         97.0%;
99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-NOV-2001; 2001WO-US47556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-JAN-2001; 2001US-262060P
                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                       Ouery Match
Best Local Similarity 99.7
Matches 319; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-599715/64.
                    320 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mochly-Rosen D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200257413-A2.
                                                                                                                                                                                                                                                                                                                                                                                                            05-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-JUL-2002
                                                                                                                          89
                                                                                                                                              61
                                                                                                                                                                  128
                                                                                                                                                                                      121
                                                                                                                                                                                                          188
                                                                                                                                                                                                                                                   248
                                                                                                                                                                                                                                                                                                                                                                                        ABG31220;
                    Sequence
                                                                                                                                                                                                                                                                                                                                                RESULT 9
                                                                                                                                                                                                                                                                                                                                                           ABG31220
SXS
                                                                                                                                                                                                                             음
                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                     g
                                                                                                                          à
                                                                                                                                             g
                                                                                                                                                                  ò
                                                                                                                                                                                      a
                                                                                                                                                                                                          ç
                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                               8
```

```
derivatives or fragments. Protein kinase C (PKC) is a key enzyme in signal transduction involved in a variety of cellular functions including cell growth, regulation of gene expression and ion channel activity. The localisation of different PKC isozymes to different areas of the cell in turn appears due to binding of the activated isozymes to the specific anchoring molecules (RACKS). Peptides that minic either the PKC-binding site on PKC are isozyme specific translocation inhibiting translocation or function of deltapkC. The celtarkC agonists or inhibiting translocation or function of deltapkC, The celtarkC agonists or antagonists are useful in reducing, enhancing or protecting against damage to cells or tissues due to ischaemic or hypoxic event caused by stroke Acute administration of the peptides, conjugated to a carrier peptide or a Tat-derived peptide, protected hearts against ischaemic damage as shown by decreased release of creatine kinase. The ischaemic damage as shown by decreased release of creatine kinase. The greater than 50% protection against ischaemic damage. The presented is human annexin V, which contains a delta RACK binding site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 PGRDLJDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   68 FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ELRAIKQVY EEEYGSSLEDDVVGDTSGYYQRMLVVLIQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     188 OAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          248 VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match 97.0%; Score 1590; DB 23; Best Local Similarity 99.7%; Pred. No. 3.6e-138; Matches 319; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Anticoagulant; PP4 protein; thromboplastin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301 KGDTSGDYKKALLLLCGEDD 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                308 KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAP90053 standard; protein; 320
```

8

ö

음

õ a õ

õ

8

셤 ð 셤

ò

```
KGDTSGDYKKALLLLSGEDD 327
                                                                                                    Claim 2; Page 2-4; 20pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAP82317 standard; protein; 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 88WO-US00340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (updated)
(first entry)
                                                                                                                                                                                                                                        Query Match 96.8 Best Local Similarity 99.4 Matches 318; Conservative
                                                                  New thrombolytic fusion
fusion of Annexin V and
             Yang G;
                                 WPI; 2000-413098/36
                                                                                                                                                                                                                 600 AA;
                                           N-PSDB; AAA11241
             Sun J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-FEB-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-MAR-2003
13-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-AUG-1988
                                                                                                                                                                                                                                                                                                                               89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAP82317;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               308
                                                                                                                                                                                                                    Sequence
             Wu Χ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ŏ
                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                      οy
                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                         FGROLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                       307
                                                                                                                                                                                                                                                                                    Annexin V; thrombocyte; carrier; thrombus; thrombolytic; fusion protein; urokinase; insect cell; fibrinolysis.
                                                                                                                                                                                                                                                                                                                                                                           ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                        MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                      VKSIRSIPAYLAETLYYAMKGAGTODHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI
                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                             Length 320;
                                                                 New DNA sequence encoding anticoagulant PP4 protein - and new recombinant protein, vectors, antibodies, etc., useful therapeutically and diagnostically.
                                                                                                                                                                                                                                                  Indels
                                                                                                                                  Amino acid sequence of anticoagulant PP4 protein. This inhibits blood coagulation at the thromboplastin stage. (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                           Score 1587; DB 10;
Pred. No. 6.9e-138;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SHAN-) SHANGHAI INST BIOCHEMISTRY CHINESE ACAD.
                                                                                                              Claim 1; page 11 and Table 1; 12pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Annexin V/urokinase fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KGDTSGDYKKALLLLCGEDD 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  900
                       Kupper
                                                                                                                                                                                                                            96.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY92930 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99CN-0113524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99CN-0113524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                     Best Local Similarity 99.4 Matches 318; Conservative
(BEHW ) BEHRINGWERKE
                                           WPI: 1989-166767/23
                      Abel
                                                                                                                                                                                                    320 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Jnidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   308
                                                                                                                                                                                                       Seguence
                                                                                                                                                                                                                                                                                                                    68
                                                                                                                                                                                                                                                                                                                                         19
                                                                                                                                                                                                                                                                                                                                                               128
                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                           188
                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY92930;
                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 11
AAY92930
```

```
ö
                                                                                                                           Annexin V, which has high affinity for active thrombocytes, is used as a carrier molecule to build a thrombus-targeting thrombolytic fusion protein. The protein (this sequence) is the result of expression of a fusion gene comprising the Annexin V gene and a low-molecular urokinase gene, in insect cells. The Annexin V-scu-PA-32 fusion protein, expressed in insect cell strain Tn-5B1-4, has high affinity for active thrombocytes and has the fibrinolytic activity of urokinase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
protein for targetting thrombus - comprises urokinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                            Length 600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAP-I; anticoagulant; anti-inflammatory agent; phospholipid; phospholipase A2; disseminated intravacular coagulation; deep vein thrombosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAP-I isolated from biological fluid, used as anticoagulant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                         96.8%; Score 1587; DB 21;
99.4%; Pred. No. 1.7e-137;
tive 1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ¥.
```

œ

```
61 GRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEITASRTPEE 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             69 GRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEE 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          129 LRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQ 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIK 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      189 AGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9 AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQBISAAFKTLF
                                                                                                                                                                                                                                                                                                                        The sequence given is the amino acid sequence of CPB-I. CPB-I was used within a method which involved adding basic amino acids to it which resulted in its stabilisation. This lead to the production of CPB-I which keeps its activity when it is frozen, molten or has been processed by several procedures.
(Updated on 10-MAR-2003 to add missing OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Calphobindin I; CPB-I; Protein kinase C; PKC; inhibition; tumour.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 319;
                                                                                                                                                                                                                                      Stabilisation of CPB-1 for drug compsn. - by adding basic aminoacid selected from lysine, arginine and/or ornithine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 96.7%; Score 1585; DB 13; Best Local Similarity 99.7%; Pred. No. 1e-137; Matches 318; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR41021 standard; protein; 319 AA
                                                                                                                                               (KAGA ) KAGAKU OYOBI KESSEI RYOHO.
(KOWA ) KOWA CO LTD.
                                                                                                                                                                                                                                                                                            Disclosure; Page 2; 4pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         309 GDTSGDYKKALLLLSGEDD 327
                                                                        90JP-0328286
                                                                                                           90JP-0328286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                   WPI; 1992-288937/35
                                                                                                                                                                                                                                                                                                                                                                                                                                                      319 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Calphobindin I
     JP04198195-A
                                                                        28-NOV-1990;
                                                                                                           28-NOV-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JP05213769-A
                                       17-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-AUG-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAR41021;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1
     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     68 FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   248 VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human proteins having anticoagulant and antiinflammatory activity .
isolated from biological fluid by anion-exchange chromatographoc media.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   128 ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                     indicating that PAP-I is probably not constitutively secreted.

The Met residue is removed at in a post-translational event and the newly formed NH2-terminal Ala residue is blocked by acctylation.

It binds to phospholipid and inhibits phopholipase A2.

It binds to phospholipid and inhibits phopholipase A2.

The protein can substitute heparin or other anticoagulants in the treatment of disseminated intravascular coagulation, deep vein thrombosis, or other disorders. It also has antiinflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CPB-I; stabilisation; frozen; molten; processed; activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96.8%; Score 1586; DB 9;
99.4%; Pred. No. 8.5e-138;
iive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                        protein does not contain a leader peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                   (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                           Carter BLA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KGDTSGDYKKALLLLCGEDD 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                     Disclosure; Page 7; 7pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR26276 standard; protein; 319
87US-0011782
87US-0059355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          st Local Similarity 99.4 itches 318; Conservative
                                                    (ZYMO) ZYMOGENETICS INC (UNIW ) UNIV WASHINGTON.
                                                                                                           Fujikawa K, Irani MH,
                                                                                                                                           WPI; 1988-235049/33.
N-PSDB; AAN82107.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      320 AA;
06-FEB-1987;
05-JUN-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo saplens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10-MAR-2003
04-FEB-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                    properties.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAR26276;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CPB-I.
```

ò Q ò g ò g ò 셤 õ 윱 õ 셤 RESULT 13 AAR2627

ö

9

```
26-FEB-2001; 2001JP-0050297
                                              Naruse H,
                                                                                                                                                                                                                                                                                              69
                                                                                                                                                                                                                                                                                                                                                                     189
                                                                                                                                                                                                                                                                                                                                 129
                                                                                                                                                                                                                                                                                                                                                                                                         249
                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Job time
                                                                                                                                                                                                                                                                                                                                                                                                                          g
  g
                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                         å
                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                     ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                   69 GRDLLDDLKSELTGRFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEE 128
                                                                                                                                                                                                                                                                                             LRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQ 188
                                                                                                                                                                                                                                                                                                                                                                                              KSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNPATSLYSMIK 308
                                                                                                                                                                                                                                                         AGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVV
                                                                                                                                                                                                                                                                                                                                                                    9 AQVLRGIVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAOROEISAAFKTLF
                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; CPB-I; eye drop; ophthalmological; anexin V; corneal disease;
calcium/phospholipid binding protein; polyhydric alcohol.
                                                                                                                                                                         Intravenously, orally, intramuscularly, percutaneously or rectally
                                                                                                                                    Calphobindin I (CPB-I) or recombinant calphobindin I (r-CPB-I) inhibits protein kinase C (PKC) and is useful in the treatment of mailgnant tumours caused by abnormal activation of PKC. CPB-I is extracted from human or animal organs and may be applied
                                                                                        Protein kinase C inhibitor effective against malignant tumours contg. (opt. recombinant) calphobindin 1
                                                                                                                                                                                                           Score 1585; DB 14; Length 319;
Pred. No. 1e-137;
0; Mismatches 1; Indels 0
                                             KOWA CO LTD.
ZH KAGAKU OYOBI KESSEN RYOHO KENKYUSHO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABG32550 standard; protein; 319 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Page 2-3; 6pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                   GDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                           96.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-FEB-2002; 2002WO-JP01563
         92JP-0019032
                           92JP-0019032
                                                                                                                                                                                                                     Local Similarity 99.7
hes 318; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Muman CPB-1 protein
                                                                       NPI; 1993-299558/38
                                                                                                                                                                                         319 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200267977-A1
                                             (KOWA ) KOWA
(KAGA-) ZH KA
         04-FEB-1992;
                          04-FEB-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-SEP-2002
                                                                                                                                                                                           Seguence
                                                                                                                                                                                                                                                                                                                        129
                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                            681
                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                   309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABG32550;
                                                                                                                                                                                                                                                                                                                                                                                              249
                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                       Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                    ô
                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                           å
                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                              윱
                                                                                                                                                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                                                                                                                               g
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                     The invention relates to eye drops contain CPB-I (anexin V) and a polyhydric alcohol having a carbonyl value of not more than 5micro Mol./g. The eyes drops are for treating e.g. corneal diseases. Such eye drops are without unpleasant irritation upon dropping but with satisfactory long-term storage stability. The present sequence is the human CPB-I (calcium/phospholipid binding) protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSKSNAQRQEISAAFKTLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9 AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                   Eye drops for treating e.g. corneal diseases, contain CPB-I and polyhydric alcohol with specific carbonyl value, without unpleasant irritation upon dropping but with satisfactory long-term storability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 319;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1585; DB 23;
Pred. No. 1e-137;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                               Inagi T;
(KOWA ) KOWA CO LTD.
(KAGA ) CHEMO-SERO-THERAPEUTIC RES INST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Search completed: August 22, 2003, 21:33:05
                                                                                                                                                                                                                                              Disclosure; Page 13-14; 16pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           309 GDTSGDYKKALLLLSGEDD 327
                                                               Shinoda Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 99.7
Matches 318; Conservative
                                                                                                           WPI; 2002-674988/72
                                                                   Sano M,
                                                                                                                                                                                                                                                                                                                                                                                                                                               319 AA
```

THIS PAGE BLANK (USPTO)

```
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
```

- protein search, using sw model OM protein August 22, 2003, 21:31:09; Search time 13.3333 Seconds (without alignments) 1037.674 Million cell updates/sec Run on:

1 MACGGGHMAQVLRGTVTDFP......KGDTSGDYKKALLLLSGEDD 327 US-09-970-969-2 1639 Title: Perfect score: Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

328717 seqs, 42310858 residues Searched:

328717 Total number of hits satisfying chosen parameters:

length: 0 length: 2000000000 Minimum DB seq Maximum DB seq

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

Issued_Patents_AA:*

/cgn2_6/ptodata/1/iaa/5A_COMB.pep:*/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

/cgn2_6/ptodata/l/iaa/6A_COMB.pep:* /cgn2_6/ptodata/l/iaa/6B_COMB.pep:* /cgn2_6/ptodata/l/iaa/PCTUS.COMB.pep:* /cgn2_6/ptodata/l/iaa/Packfilesl.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

ó

Gaps

ó

9

1 MACGGGHMAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEI

ò g ŏ qq

Query Match 100.0%; Score 1639; DB 4; Length 327; Best Local Similarity 100.0%; Pred. No. 1.8e-150; Matches 327; Conservative 0; Mismatches 0; Indels 0

ORGANISM: Homo sapiens

; ORGANISM: Hon US-09-324-096A-2

240

241 241

ò

g ŏ g

g ò g

δ

RESULT 2 US-09-324-096A-6

	Description	Sequence 2, Appli	9	4	'n	_	Patent No. 5225537	_	7	Sequence 3, Appli	7	4	Sequence 14, Appl	7	4	Sequence 5, Appli	13,	ŵ	62	Sequence 65, Appl	99	4	Sequence 63, Appl	64	2,7	Sequence 2, Appli	2	9
SUMMARLES	ID	US-09-324-096A-2	US-09-324-096A-6	US-09-324-096A-4	US-08-125-746-3	US-08-948-276-1	5225537-4	US-08-125-746-1	US-08-948-276-2	US-08-948-276-3	US-08-149-975A-2	US-08-948-276-4	US-08-526-136-14	US-08-526-136-2	US-08-526-136-4	US-08-948-276-5	US-08-526-136-13	US-08-948-276-6	US-09-325-932A-62	US-09-325-932A-65	US-09-325-932A-66	US-09-157-257-4	US-09-325-932A-63	US-09-325-932A-64	US-08-923-511-2	US-09-416-874A-2	-603 - 1	US-09-157-257-6
	60	4	4	4	-	4	ø	-	4	4	7	4	m	e	٣	4	m	4	4	4	₩	4	4	4	m	4	m	4
	Query Match Length DB	327	327	327	320	320	320	319	319	318	319	321	319	503	505	323	466	346	316	239	184	849	111	73	701	701	533	539
de	Query	100.0	99.5	98.7	97.0	97.0	97.0	4.96	90.3	88.8	88.4	56.3	55.8	52.8	52.8	49.0	47.5	39.5	23.0	15.0	14.2	7.9	7.3	6.7	6.5	6.5	6.4	6.4
	Score	1639	1630	1618	1590	1590	1590	1585	1479.5	1455.5	1448.5	923	914	865	865	802.5	779	643	377.5	245.5	232	130	120	109	106.5	106.5	105.5	105.5
	Result No.	-	7	m	4	S	9	7	6 0	σ'n	10	11	12	13	14	15	16	17	18	19	20	21	22	23	74	25	56	27

```
; MOLECULE T)
US-08-125-746-3
                        61
                                                                                                                                              241
                                                                                                                                                                     241
                                                                                                                                                                                                                    301
                     g
                                               ò
                                                                       a
                                                                                               õ
                                                                                                                    엄
                                                                                                                                               à
                                                                                                                                                                     셤
                                                                                                                                                                                             ò
                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                  SAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEI 120
                                                                                                                                                                                                                                                                                                                  IASRTPEELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVE 180
                                                                                                                                                                                                                                                                                                                                                                                                    QDAQALFQAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNL 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                EQLLLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFA 300
                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                       1 MACGGGHMAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MACGCGHMAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEI
                              APPLICANT: Talt, Jonathan
APPLICANT: Talt, Jonathan
APPLICANT: Brown, David
TITLE OF INVENTION: ANNEXIN DERIVATIVE WITH ENDOCENOUS CHELATION SITES
FILE REFERENCE: UOFW-1-13841
CURRENT APPLICATION NUMBER: US/09/324,096A
CURRENT FILING DATE: 1999-06-01
NUMBER OF SEO ID NOS: 12
SOFTWARE: Patentin version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                        Length 327;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 327;
                                                                                                                                                                                                                               1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                       Score 1630; DB 4;
Pred. No. 1.3e-149;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ouery Match 98.7%; Score 1618; DB 4;
Best Local Similarity 99.4%; Pred. No. 1.9e-148;
Matches 325; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TSLYSMIKGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TSLYSMIKGDTSGDYKKALLLLSGEDD 327
Sequence 6, Application US/09324096A
                                                                                                                                                                                                       99.58;
                                                                                                                                                                                                      Query Match
Best Local Similarity 99.7
Matches 326; Conservative
                                                                                                                                                        ; TYPE: PRT
; ORGANISM: Homo saptens
US-09-324-096A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Homo sapiens
                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-324-096A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-324-096A-4
                                                                                                                                 SEQ ID NO 6
LENGTH: 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 327
TYPE: PRT
                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 4
                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         合
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                     õ
                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ô
```

```
121 IASRTPEELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVE 180
                                                                                   181 ODAQALFQAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNL 240
                                                                                                                                                                                                                                                                   EQLLLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFA 300
                                                                                                                                                                              ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, ADDRESSE: P.C.
STREET: 1755 S. Jefferson Davis Highway, Suite 400
CITY: Arilington
STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPALIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US/08/125,746
FILING DATE: 24-SEP-1993
CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: SAINO, YUSHI
APPLICANT: IMASAKI, AKIO
APPLICANT: SUDA, MAKOTO
TITLE OF INVENTION: ANTICOAGULANT POLYPEPTIDE
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR PAPLICATION DATA:
APPLICATION NUMBER: JP 184428/1987
AFLICING DATE: 33-JUL-1987
AFTORNEY/AGENT INFORMATION:
NAME: Oblon, No. 5591633man F.
REFERENCE/DOCKET NUMBER: 24,618
REFERENCE/DOCKET NUMBER: 60-074-0 DIV
                                                                                                                                                                                                                                                                                                                                301 TSLYSMIKGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/807,623
FILING DATE: 13-DEC-1991
PRIOR APPLICATION DATA:
FILING DATE: 20-FEB-1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 3, Application US/08125746 Patent No. 5591633 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE: (703) 413-3000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAN. (703) 413-220
TELEFAN. 248655 OPAI UR
INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-125-746-3
```

```
PHOSPHOLIPID-BINDING PROTEINS
NUMBER OF SEQUENCES: 14
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/459,082
FILING DATE: 29-DEC-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/125,746
FILING DATE: 24-SEP-1993
CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KGDTSGDYKKALLLCGEDD 320
    301 KGDISGDYKKALLLLCGEDD 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1, Application US/08125746 Patent No. 5591633
                                                                                                                                                                                                                             97.0%;
                                                                                                                                                                                                                                                       Matches 319; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 22202
COMPUTER READABLE FORM:
                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY: U.S.A.
                                                                                                                                                                                        LENGTH: 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-125-746-1
                                                                                                                                                                                                                                                                                   œ
                                                                                                                                                                                                                                                                                                                                      89
                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                          128
                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                               188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  308
                                                                                                                                                                          ; SEQ ID NO:4:
                                         RESULT 6
5225537-4
                                                                                                                                                                                                    5225537-4
                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
    g
                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                               임
                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                   뎏
                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                               247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
                            ö
                                                                                                                                                              187
                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       248 VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              68 FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              67
                                                        67
                                                     8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                           ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                        121 ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANKDPDAGIDEAQVEQDAQAALF
                                                                                                                                                                                                               QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                  248 VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI
                                                                                                                                                                                                                                                                                  8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         128 ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            188 QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Gaps
                              ö
    Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
 Score 1590; DB 1;
Pred. No. 9.5e-146;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 1590; DB 4;
Pred. No. 9.5e-146;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Ernst, Joel D.
TITLE OF INVENTION: GFP-Annexin Fusion Proteins
FILE REFERENCE: UCSF97-113
CURRENT APPLICATION NUMBER: US/08/948,276
CURRENT FILING DATE: 1997-10-09
NUMBER OF SEO ID NOS: 6
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                      101 KGDTSGDYKKALLLLCGEDD 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                       308 KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1, Application US/08948276
Patent No. 6511829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match
Best Local Similarity 99.7%;
Matches 319; Conservative
sch 97.0%;
al Similarity 99.7%;
319; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-948-276-1
                                                                                                                                                                                                                                                                                                                                                                                          RESULT 5
US-08-948-276-1
                                                                                                                                                                                                               188
                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   308
 Query Match
Best Local 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 1
                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                           g
                                                                                                       õ
                                                                                                                              q
                                                                                                                                                          õ
                                                                                                                                                                                a
                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                 ŏ
                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           윰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
```

```
ELRAIKOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF 187
                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                           247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 127
                                                                                                                                                                                                                                                              67
                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 1755 S. Jefferson Davis Highway, Suite 400 STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE: Floppy disk
COMPUTER: IBM FOC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
Patent No. 5225537

APPLICANT: FOSTER, DONALD

TITLE OF INVENTION: METHODS FOR PRODUCING HYBRID
                                                                                                                                                                                                               9.5e-146;
                                                                                                                                                                                                DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: SAINO, YUSHI
APPLICANT: INASAKI, AKIO
APPLICANT: SUDA, MAKOTO
TITE OF INVENTION:
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                              Score 1590;
Pred. No. 9.
```

ö

Ä

```
73 LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                  64 VDDLKSELTGRFEKLIVANMXPSRLYDAYELKHALKGAGTDEKVLTEIIASRTPEELSAI 123
                                                                                                                                                                               133 KQVYEEEYGSSLEDDVVGDTSCYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                  193 KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    242 RSIPAYLAETLYYAMKGAGTDDHTLIRVIVSRSEIDLFNIRKEFRKNFATSLYSMIKGDT 301
                                                                     4 RGTVTDFPGFDGRADAEVLRKAMKGLGTDEDSILNLLISRSNAQRQEIAQEFKTLFGRDL 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                             184 KWGTDEEKFITIFGTRSVSHLRRVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12 LRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 LRGIVIDESGEDGRADAEVLRKAMKGLGTDEDSILNLLTARSNAQRQQIAEEFKTLFGRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       132 IKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDT
                    1; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 318;
                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       88.8%; Score 1455.5; DB 4; 91.8%; Pred. No. 9.6e-133; tive 12; Mismatches 13;
                    ä
     Pred. No. 4.6e-135;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Ernst, Joel D.
TITLE OF INVENTION: GFP-Annexin Fusion Proteins
FILE REFERENCE: UCSP97-113
CURRENT APPLICATION NUMBER: US/08/948,276
CURRENT FILING DATE: 1997-10-09
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin Ver. 2.0
                  9; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 3, Application US/08948276 Patent No. 6511829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    302 SGDYKKALLLCGGEDD 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SGDYKKALLLL-SGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                              GDYKKALLLCGGEDD 319
                                                                                                                                                                                                                                                                                                                                                                             GDYKKALLLL-SGEDD 327
 93.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 91.8%
Matches 291; Conservative
                296; Conservative
   Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TYPE: PRT
; ORGANISM: rat
US-08-948-276-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-948-276-3
                                                                                                                                                                                                                                                                                                                                                                             313
                                                                                                                                                                                                                                                                                                                                                                                                          304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEG ID NO 3
                  Matches
                                                    ð
                                                                                 셤
                                                                                                                 ç
                                                                                                                                              g
                                                                                                                                                                                 ò
                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                            음
                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIK 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9 AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLF
                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 319;
                                                                                                                                                                                                                                                                                                                                                                                                           Length 319;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                          Score 1585; DB 1;
Pred. No. 2.9e-145;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 2, Application US/08948276
Patent No. 6511829
GENERAL INFORMATION
GENERAL INFORMATION
TITLE OF INVENTION: GFP-Annexin Fusion Proteins
FILE REFERENCE: UCSF97-113
CURRENT APPLICATION NUMBER: US/08/948,276
CURRENT FILING DATE: 1997-10-09
NUMBER OF SEQ. ID NOS: 6
SOFTWARE: Patentin Ver. 2.0
                                                         | PRIOR AFFLEATION NUMBER: JP 037227/1987 | PRIOR AFPLICATION NUMBER: JP 037227/1987 | PRIOR AFPLICATION NUMBER: JP 184428/1987 | PRIOR AFPLICATION NUMBER: JP 184428/1987 | PRILING DATE: 23-JUL-1997 | ATTONNEY/ABORT INFORMATION: NAME: Oblon, NO. 5591633man F. REGISTRATION NUMBER: 24,618 | REFERENCE/DOCKET NUMBER: 80-074-0 DIV TELECOMMUNICATION INFORMATION: TELECOMMUNICATION INFORMATION: TELECOMMUNICATION INFORMATION: TELECOMMUNICATION INFORMATION: TELECOMMUNICATION INFORMATION: TELECOMMUNICATION INFORMATION: TELECOMMUNICATION FOR SED ID NO: 1: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  90.3%; Score 1479.5;
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/807,623
FILING DATE: 13-DEC-1991
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301 GDTSGDYKKALLLLCGEDD 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 96.7%;
Best Local Similarity 99.7%;
Matches 318; Conservative
                                                                                                                                                                                                                                                                                                           : 319 amino acids amino acids
                                                                                                                                                                                                                                                                                                                                      ; TOPOLOGY: unknown
; MOLECULE TYPE: protein
US-08-125-746-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: mouse
                                                                                                                                                                                                                                                                                                             LENGIH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-948-276-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-948-276-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
                                                                                                                                                                                                                                                                                                                             TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
```

à

õ

ij

```
74 DDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIK 133
                                                                                                                                                                                                                                                                                                                                                   68 DDLKSELSGNFEQVIVGMATPTVLYDVQELRRAMKGAGTDEGCLIEILASRTPEEIRRIS 127
                                                                                                                                                                                                                                                                                                                                                                                                        254 IPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14 GTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                             188 WGTDEVKFLIVLCSRNRNHLIHVFDEYKRISQKDIEQSIKSETSGSFEDALLAIVKCMRN
                                                                                                                                                                                                                                                                                                 QVYEEFYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGELK
                                                                                                                                                                                                                                                                                                                                                                                                                                            194 WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS
                                                                                                                                                                                                                            Ouery Match 56.3%; Score 923; DB 4; Length 321; Best Local Similarity 58.3%; Pred. No. 3.2e-81; Matches 183; Conservative 53; Mismatches 78; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: Boston
STATE: Massachusetts
COUNTRY: U.S.A.
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 55SX
OPREATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: WordPerfect (Version 5.0)
CURRENT APPLICATION DATA:
                                                   APPLICANT: Ernst, Joel D.
TITLE OF INVENTION: GFP-Annexin Fusion Proteins
FILE REFERENCE: UCSP97-113
CURRENT APPLICATION NUMBER: US/08/948,276
CURRENT FILING DATE: 1997-10-09
NUMBER OF SEO ID NOS: 6
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/08/526,136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 14, Application US/08526136
Patent No. 6107089
GENERAL INFORMATION:
APPLICATY: Towle, Christine A. et rITLE OF INVENTION: ANNEXIN XI
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        et
             Sequence 4, Application US/08948276
Patent No. 6511829
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    308 DYRKVLLVLCGGDD 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    314 DYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                     , ORGANISM: human
US-08-948-276-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-526-136-14
                                                                                                                                           SEQ ID NO 4
    US-08-948-276-4
                                                                                                                                                                                                                                                                                                                                                                                     134 (
                                                                                                                                                                           TYPE: PRT
                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    72 LLDDLKSELTGKFEKLIVALMKPSRLYDAYELKBALKGAGTNEKVLTEIIASRTPEELRA 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12 LRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRD 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 2; Length 319;
                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match

88.4%; Score 1448.5; DB 2

Best Local Similarity 91.5%; Pred. No. 4.6e-132;

Matches 290; Conservative 12; Mismatches 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   303 SGDYKKALLLICGGEDD 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SGDYKKALLLL-SGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             not relevant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid
STRANDEDNESS: no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY:
RESULT 10
US-08-149-975A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-149-975A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ç
```

253

193

ó

Gaps ö 67

```
(617) 542-5070
(617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               313 GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                            TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 225 FracTY: Boston STATE: Massach
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: N/A
                                                                                                                                                                                                                                                                                                         TELEPHONE:
                                                                                                                                                                                                                                                                                                                                 TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               74 DDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIK 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       126 QTYQLQYGRSLEDDIRSDTSFMFQRVLVSLSAGGRDESNYLDDALMRQDAQDLYEAGEKK 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              254 IPAYLAETLYYAMKGAGTDDHTLIRVWVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                134 QVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGELK 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      194 WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14 GTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 55.8%; Score 914; DB 3; Length 319; Best Local Similarity 58.0%; Pred. No. 2.3e-80; Matches 182; Conservative 51; Mismatches 91; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUW TYPE: 3.5" Diskette, 1.44 Mb
MEDIUW TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 558X
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE WATCHERE (Version 5.0)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/526,136
                               FILING DATE: February 13, 1992
APPLICATION NUMBER: 07/637,775
FILING DATE: February 13, 1992
APPLICATION NUMBER: 07/64,465
FILING DATE: September 23, 1991
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REFERENCE/DOCKET NUMBER: 00786/099001
TELEFHONE: (617) 542-8006
TELEFHONE: (617) 542-8006
TELEFAX: (617) 542-8006
APPLICATION NUMBER: US/08/214,036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-526-136-2
Sequence 2. Application US/08526136
Patent No. 6107009
GENERAL INFORMION:
APPLICANT: TOWIC, Christine A. et
TTYLE OF INVENTION: ANNEXIN XI
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
CITY: Boston
STATE: Massachusetts
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ||:| ||:| || || DYRKVLLILCGGDD 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          314 DYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
STRANDEDNESS: N/A
                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-526-136-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ठे
```

```
73 LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    193 KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   253 SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     84; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: U.S.A.
ZIP: 02110-2804
COMPOTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 558X
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: WordPerfect (Version 5.0)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 52.8%; Score 865; DB 3; Best Local Similarity 54.9%; Pred. No. 2.5e-75; Matches 173; Conservative 58; Mismatches 84;
CLASSIFCATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/214,036
FILING DATE: WEBER: 07/837,775
FILING DATE: February 13, 1992
APPLICATION NUMBER: 07/764,465
FILING DATE: September 23, 1991
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T:
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00786/099001
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-526-136-4

Sequence 4, Application US/08526136

Patent No. 6107089

GENERAL INFORMATION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 36

CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           73 LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 505;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          52.8%; Score 865; DB 3; Length 50 54.9%; Pred. No. 2.5e-75; ive 58; Mismatches 84; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Ernst, Joel D.
TITLE OF INVENTION: GPP-Annexin Fusion Proteins
FILE REPRENCE: UCSF97-113
CURRENT APPLICATION NUMBER: US/08/948,276
CURRENT FILING DATE: 1997-10-09
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 5
                                                                                                                          APPLICATION NUMBER: 07/837,775
FILING DATE: February 13, 1992
APPLICATION NUMBER: 07/764,465
FILING DATE: September 23, 1991
ATTORNEY/AGENT INFORMATION:
NAME: CLARK, PAUL T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00786/099001
                 APPLICATION NUMBER: US/08/526,136 FILING DATE:
                                                   CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/214,036
                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 00786
TELECOMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELERA: 200154
INFORMATION FOR SED ID NO: 4:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 5, Application US/08948276
Patent No. 6511829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |||:| || : | :|
491 GDYRKILLKICGGND 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     313 GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 52.8
Best Local Similarity 54.9
Matches 173; Conservative
CURRENT APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                   amino acid
                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: PRT
; ORGANISM: human
US-08-948-276-5
                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-948-276-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-526-136-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
```

```
125
                                                                                                                                                                                                               122 SRQMKDISQAYYTVYKKSLGDDISSETSGDFRRALLTLADGRRDESLKVDEHLAKQDAQI 181
                                                                                                                                                                                                                                                     245
                                                                                                                                                                                                                                                                                    24.1
                                                                                                                                                         121
                                                                                                                                                                                        .26 PEELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQA 185
                                                                                                                                                                                                                                                                                                                    246 AVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYS 305
                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                    62 AAYGKELKDDLKGDLSGHFEHLMVALVTPPAVFDAKQLKKSWKGAGTNEDALIEILTTRT
                                                              6 GHMAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFK
                                                                                66 TLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRT
                                                                                                                                                                                                                                                     186 LFQAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLL
                                  Gaps
                                5,
Length 323;
49.0%; Score 802.5; DB 4;
49.4%; Pred. No. 1.5e-69;
ive 61; Mismatches 97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           completed: August 22, 2003, 21:37:04
ne : 20.3333 secs
                                                                                                                                                                                                                                                                                                                                                                                                        302 AIKSDTSGDYEITLLKICGGDD 323
                                                                                                                                                                                                                                                                                                                                                                                  306 MIKGDTSGDYKKALLLLSGEDD 327
                                Conservative
                  Similarity
 Query Match
Best Local Simil
Matches 159; C
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Search comp
Job time :
                                                                ŏ
                                                                                                                           ŏ
                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                 δŽ
                                                                                            g
                                                                                                                                                       g
                                                                                                                                                                                          ò
                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                     ŏ
                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                    ò
```

THIS PAGE BLANK (USPTO)

```
5.1.6
Compugen Ltd.
GenCore version
Copyright (c) 1993 - 2003
```

protein search, using sw model OM protein August 22, 2003, 21:30:17; Search time 15 Seconds Run on:

(without alignments)
2096.477 Million cell updates/sec

US-09-970-969-2 1639

1 MACGGGHMAQVLRGTVTDFP......KGDTSGDYKKALLLLSGEDD 327 Title: Perfect score: Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

283308 Total number of hits satisfying chosen parameters:

283308 seqs, 96168682 residues

Searched:

seq length: 0 seq length: 2000000000 8 6 6 6 Minimum | Maximum | Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

1: pirl:*
2: pir2:*
3: pir3:*
4: pir4:* PIR_76:* Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	annexin V [validat	>	>	annexin V - chicke	annexin VI [valida	annexin VI - mouse	annexin IV - human	annexin IV - pig	annexin VI - rat	annexin IV - bovin	annexin - chicken	annexin XI form A	annexin XI form B	annexin XI - rabbi	annexin XI - human	annexin VIII - hum	annexin III - huma	annexin VII, long	annexin III - rat	annexin VII - mous	annexin XII - Hydr	1	hypothetical prote	annexin II - human	annexin II - bovin	annexin II - rat	annexin II - mouse	annexin II - rat	annexin IX - fruit
SUMMARIES	QI	AOHUP	S27214	LURTS	LUCHS	AQHU68	S01786	A42077	LUPG4	S52844	LUBO4	JC2029	LUB011	S23447	LURB11	. A53152	LUHUB	LUHU3	LUHU7	LURT3	S29170	LUJF12	S70644	S41022	LUHU36	LUB036	S33700	LUMS36	S55277	LUFF9
	BB	٦	7	-	Н	ч	-	-	-	ч	-	N	Н	-	-	7	-	-	-	-	~	-	ď	N	-	٦	N	Н	7	-
	Query Match Length	320	320	319	321	673	673	321	318	673	319	671	503	505	503	202	327	323	488	324	463	316	512	9/9	339	339	339	339	341	296
đ	Ouery Match	97.0	93.7	88.8	78.0	56.9	56.9	56.3	56.2	56.2	55.8	54.7	52.8	52.8	52.7	52.2	50.7	49.0	47.5	47.3	47.2	43.8	43.4	43.3	42.6	42.4	42.3	42.2	41.6	41.6
	Score	1590	1536.5	1455.5	1279	932	932	923	921	921	914	896.5	865	865	863	855	831.5	802.5	779	775	773	718	711	709	698.5	694.5	693.5	691.5	682.5	682
	Result No.	-	7	Э	4	'n	w	7	æ	σı	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	53

A;Cross-references: EMBL:M18366; NID:g179131; PIDN:AAA35570.1; PID:g179132
R;Ywasaki, A.; Suda, M.; Nakao, H.; Nagoya, T.; Saino, Y.; Arai, K.; Mizoguchi, T.; S
J. Biochem. 102, 1261-1273, 1987
A;Title: Structure and expression of cDNA for an inhibitor of blood coagulation isola

A;Title: Primary structure of human placental anticoagulant protein. A;Reference number: A29417; MUID:88164463; PMID:2964863 A;Contents: amino-terminal acetylation A;Accession: A29417

A; Molecule type: mRNA A; Residues: 1-320 <FUN>

~	annexin X - fruit annexin II type 1 annexin XIIIa - do	,,,,					
LUHUIS JQ1298	LUFF10 JQ1297 A57076	B57076 LUCH2	LUGP1 LUHU	S28228 LURT1	A44118 LUMS1	E88452 LUPY1	LUJP1
7	7	77				~	~
316	321 340 316	357	346 346	346 346	343	322	346
41.4	41.4 41.2 40.9	40.9	39.5	39.2	38.4	35.5	33.1
679 678.5	678 675.5 671	671 666.5	648 643	643 632	630 624	582 578.5	542
30	3 8 8 2 8 4	35	37	39	41	44	45

ALIGNMENTS

```
Alternate names: endonexin II; lipocortin V; placental anticoagulant protein; place C; Species: Homo Saplens (man) and C; Species: Homo Saplens (man) captens (man) captens (man) captens (man) captens (man) decession: D20250; A30206; A28076; S01016; A29417; A41514; A28038; C31953; S06646; C; Accession: D20250; A30206; A28076; S01016; A29417; A41514; A28038; C31953; S06646; R; Pepinsky, R.B.; Tizard, R.; Mattaliano, R.J.; Sinclair, L.K.; Miller, G.T.; Brownin J. Blol. Chem. 263, 10799-10811, 1988 A; Title: Five distinct calcium and phospholipid binding proteins share homology with A; Reference number: A92659; MUID:88273202; PMID:2968983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Wolecule type: mRNA
A; Residues: 1-320 <PRDA
A; Cross-references: GB:M11731; NID:g186969; PIDN:AAA36166.1; PID:g307116
A; Grundmann, U.; Abel, K.J.; Bohn, H.; Loebermann, H.; Lottspeich, F.; Kuepper, H.
Proc. Natl. Acad. Sci. U.S.A. 85, 3708-3712, 1988
A; Title: Characterization of CDNA encoding human placental anticoagulant protein (PP4
A; Reference number: A30206; MUID:88234495; PMID:2967495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: GB:M19384; NID:g189614; PIDN:AAB59545.1; PID:g189615
R;Kaphan, R.; Jaye, M.; Burgess, W.H.; Schlaepfer, D.D.; Haigler, H.T.
J. Biol. Chem. 263, 9837-8043, 1988
A;Title: Cloning and expression of cDNA for human endonexin II, a Ca(2+) and phosphol A;Reference number: A28076; MUID:88228020; PMID:2967291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: GB:J03745; NID:g182111; PIDN:AAA52386.1; FID:g182112
R;Maurer-Fogy, I.; Reutelingsperger, C.P.M.; Pieters, J.; Bodo, G.; Stratowa, C.; Hau
Eur. J. Biochem. 174, 585-592, 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A:Title: Cloning and expression of cDNA for human vascular anticoagulant, a Ca-depend A:Reference number: S01016; MUID:88271329; PMID:2455636 A:Accession: S01016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Molecule type: mRNA
A;Residues: 1.320 <MAU>
A;Residues: 1.320 <MAU>
A;Cross-references: EMBL:X12454; NID:g37636; PIDN:CAA30985.1; PID:g37637
A;Vote: part of this sequence was confirmed by protein sequencing
R;Punakoshi, T.; Hendrickson, L.E.; McMullen, B.A.; Fujikawa, K.
Biochemistry 26, 8087-8092, 1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: mRNA
A; Residues: 1-320 <KAP>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: mRNA
A; Residues: 1-320 <GRU>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Accession: A30206
```

a a

ö

0; Gaps

187 180 247

127

9 63

307 300

```
deficion.

comment: Annexin V has been proposed to play a role in the inhibition of blood coag olipid-binding rather than proteolytic inactivation. It does not affect thrombin-depe c;Superfamily: annexin is annexin repeat homology

C;Superfamily: annexin is anticomorphy and including in an expect the property of an including in a certification and including in an expect homology and including 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                anesin V - bovine
Allernate names: CaBP33; CaBP37
C;Species: Bos primigenius taurus (cattle)
C;Species: Bos primigenius taurus (cattle)
C;Species: OB-Jun-1994 #sequence_revision 10-Feb-1995 #text_change 26-Feb-1999
C;Stacession: S27214; S37215
R;Learmonth, M.P.; Howell, S.A.; Harris, A.C.M.; Amess, B.; Patel, Y.; Glambanco, I.; Biochim: Biophys. Acta 1160, 76-83, 1992
A;Title: Novel isoforms of CaBP 33/37 (Annexin V) from mammalian brain: structural an A;Acteronce number: S27214; MuID:93041974; PMID:1420335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Residues: 1-320 <LEA>
A; Residues: 1-320 <LEA>
A; Residues: 1-320 <LEA>
A; Residues: 1-35, T', 37-124, E', 126-320 <LE2>
A; Residues: 1-35, T', 37-124, E', 126-320 <LE2>
A; Residues: 1 is uncertain whether the sequence differences are due to allelic variation C; Comment: Annexins undergo reversible, calcium-dependent binding to membrane phosphoderstood.
F;33,35,36/Binding site: calclum, low affinity (Thr, Glu, Glu) *status experimental F;737,8/Binding site: calclum, low affinity (Leu, Glu) *status experimental E:100,102,104,14/Binding site: calclum, high affinity (Leu, Gly, Gly, Asp) *status F;259,261,663,303/Binding site: calclum, high affinity (Met, Gly, Asp) *status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              248 VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ELRAIKOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    188 QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score .1590; DB 1; Length 320;
Pred. No. 8.6e-95;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 KGDTSGDYKKALLLLCGEDD 320
                                                                                                                                                                                                                                                             Query Match 97.0%;
Best Local Similarity 99.7%;
Matches 319; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     윉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A. Map position: 4926-4928
A. Introns: 3/3; 32/1; 63/3; 101/3; 132/1; 158/3; 177/3; 209/1; 241/1; 260/3; 301/3
C. Superfamily: annexin repeat homology
C. Keywords: acetylated amino end; anticoagulant; calcium binding; duplication; endonexin
F; 2-320/Product: annexin repeat homology caxi>
F; 29-45/Region: endonexin fold *status predicted
F; 90-161/Pomain: annexin repeat homology caxi>
F: 101-117/Region: endonexin fold *status predicted
F; 90-161/Pomain: annexin repeat homology caxi>
F: 101-117/Region: endonexin fold *status predicted
F; 173-245/Domain: annexin repeat homology caxi>
F: 185-201/Region: endonexin fold *status predicted
F; 173-245/Domain: annexin repeat homology caxi>
F: 185-201/Region: endonexin fold *status predicted
F; 249-320/Domain: annexin repeat homology caxi>
F: 185-201/Region: endonexin fold *status predicted
F; 249-320/Domain: annexin repeat homology caxi>
F: 249-320/Domain: annexin repeat homology caxi>
F: 249-320/Domain: annexin repeat homology caxi
F; 249-320/Domain: annexin fold *status predicted
F; 249-320/Domain: annexin fold *status predicted
F; 249-320/Domain: annexin fold *status and (ala) (in mature form) *status experimental
F; 25/Binding site: phosphate (Thr) (covalent) *status predicted
F; 27/Binding site: calcium, high affinity (Met, Gly, Gly, Glu) *status experime
                                                                                                                                            A; Residues: 1-320 < TWA.
A; Residues: 1-320 < TWA.
A; Cross-references: GB:D00172; NID:9219480; PIDN:BAA00122.1; PID:9219481
A; Octoss-references: GB:D00172; NID:9219480; PIDN:BAA00122.1; PID:9219481
A; Octoss-references: GB:D00172; NID:9217med by protein sequencing
B; Schlaepfer, D.D.; Mehlman, T.; Burgess, W.H.; Haigler, H.T.
Proc. Natl. Acad. Sci. U.S.A. 84, 6078-6082, 1987
Proc. Natl. Acad. Sci. U.S.A. 84, 6078-6082, 1987
A; Title: Structural and functional characterization of endonexin II, a calcium- and phos A; Reference number: A28038; MUID:87317598; PMID:2957692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A. Molecule type: protein

A. Molecule type: protein

A. Mayr, 15-11,181-198;202-207;209-226;228-238;246-271;277-282;

R. Huber, R.; Schneider, M.; Mayr, I.; Roemisch, J.; Paques, E.P.

FEBS Lett. 275, 15-21, 1990

A. Title: The calcium binding sites in human annexin V by crystal structure analysis at 2 A: Reference number: A3726; MID:91085549; PMID:248156

A. Contents: annotation; X-ray crystallography, 2.0 angstroms

A: Note: three calcium ions are strongly bound at sites in the first, second, and fourth B: Frunkoshi, T.; Heimark, R.L.; Hendrickson, L.E.; McMullen, B.A.; Fujlkawa, K.

Biochemistry 26, 5572-5578, 1987

A: Title: Human placental anticoagulant protein: isolation and characterization.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cont
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-320 <RES>
A;Cross-references: EMBL:U01691; NID:9430964; PIDN:AAB40047.1; PID:9430966
C;Comment: Annexins undergo reversible, calcium-dependent binding to membrane phospholig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C:Comment: Annexin V has been proposed to play a role in the inhibition of blood coagula olipid-binding rather than proteolytic inactivation. It does not affect thrombin-depende
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: protein
A; Mesidues: 86-131, 'W', 260-272, 274-297, 300-315, 'X', 317-320 <SCH>
A; Residues: 86-131, 'W', 260-272, 274-297, 300-315, 'X', 317-320 <SCH>
R; Ahn, N.G.; Teller, D.C.; Bienkowski, M.J.; McMullen, B.A.; Lipkin, E.W.; de Haen, C.
J. Biol. Chem. 263, 18657-18663, 1988
A; Ittle: Sedimentation equilibrium analysis of five lipocortin-related phospholipase A-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A.Molecule type: protein
A.Residues: 85-93 <AHN>
R.Rothut, B.: Comera, C.; Cortial, S.; Haumont, P.Y.; Diep Le, K.H.; Cavadore, J.C.; C
Biocham. J. 263, 929-935, 1989
A.Title: A 32 kDa lipocortin from human mononuclear cells appears to be identical with
A.Reference number: $06646; MUID:90088443; PMID:2532007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RiFernandez, M.P.; Morgan, R.O.; Fernandez, M.R.; Carcedo, M.T.
Gene 149, 253-260, 1994
A;Title: The gene encoding human annexin V has a TATA-less promoter with a high G+C
A;Reference number: 137172; MUID:95047484; PMID:7958998
     A; Reference number: A41514; MUID:88139278; PMID:2963810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Reference number: A92696; MUID:89066652; PMID:2974032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Cross-references: GDB:120555; OMIM:131230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Molecule type: protein
A;Residues: 29-73;274-297;300-320 <FU2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Accession: S06646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Accession: A29670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A,Accession: C31953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Gene: GDB: ANX5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        derstood
```

3

Fri Aug

```
annexin V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                               å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Comment: Annexin V has been proposed to play a role in the inhibition of blood coagula ciseratus.
C;Comment: Annexin V has been protecolytic inactivation. It does not affect thrombin-depende c;Genetics:
A;Introns: 1/3; 30/1; 61/3; 99/3; 130/1; 156/3; 175/3; 207/1; 239/1; 258/3; 299/3
C;Superfamily: annexin I; annexin repeat homology
C;Superfamily: annexin I; annexin repeat homology
C;Superfamily: annexin V status predicted (AMT>
F;2-319/Product: annexin repeat homology (AXI>
F;6-87/Domain: annexin repeat homology (AXI>
F;88-159/Domain: annexin repeat homology (AXI>
F;99-115/Region: endonexin fold *status predicted
F;171-243/Domain: annexin repeat homology (AXI>
F;181-199/Region: endonexin fold *status predicted
F;27-318/Domain: annexin repeat homology (AXI>
F;28-274/Region: endonexin fold *status predicted
F;26-28,30,70/Binding site: calcium, high affinity (Met, Gly, Glu) *status predicted
F;31,33,34/Binding site: calcium, low affinity (Thr, Glu, Asp) *status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rimal, Y.; Kohaaka, S.
Eur. J. Blochem. 232, 327-334, 1995
Fur. J. Blochem. 232, 327-334, 1995
A;Title: Structure of rat annexin V gene and molecular diversity of its transcripts.
A;Reference number: $66680; MUID:96035863; PMID:7556178
A;Accession: $66680
A;Accession: $6680
A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nationate names: endonexin II; lipocortin V; placental anticoagulant protein; placental (Species: Rattus norvegicus (Norway rat))
C; pate: 30-Sep-1992 #sequence_revision 30-Sep-1992 #text_change 22-Jun-1999
C; Accession: C22250; 566680
R; Pepinsky, R.B.; Tizard, R.; Mattaliano, R.J.; Sinclair, L.K.; Miller, G.T.; Browning, J. Biol. Chem. 263, 10799-10811, 1988
A; Title: Five distinct calcium and phospholipid binding proteins share homology with lift A; Reference number: A92659; MUID:88273202; PMID:2968983
                                                                                                                                                                                                                                                                                                        AGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVV 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                               LRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQ 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIK 308
                                                                                                                                                              68
                                                                                                                                                                                             9 AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLF
                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Molecule type: mRNA
A;Residues: 1-319 <PEP>
A;Cross-references: GB:M21730; NID:9205138; PIDN:AAAA1512.1; PID:9205139
                                                                                       Ä
       Length 320;
                                                                                   Indels
   Score 1536.5; DB 1;
Pred. No. 2.3e-91;
5; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDTSGDYKKALLLCGGEDD 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GDTSGDYKKALLLL-SGEDD 327
   tch 93.7%;
al Similarity 96.6%;
309; Conservative
Query Match
Best Local S:
Matches 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      309
                                                                                                                                                                                                                                                                                                            69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           annexin V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      derstood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                        ç
                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                   å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
```

```
A; MOLECULE LYPE: MRNA
A; MOLECULE LYPE: MRN30971; GB:J03194; NID:9211138
A; Cross-references: GB:M30971; GB:J03194; NID:9211138
B; Genge, B.R.; Wu, L.N.Y.; Adklsson IV, H.D.; Wuthler, R.E.
A; Genge, B.R.; Wu, L.N.Y.; Adklsson IV, H.D.; Wuthler, R.E.
A; Title: Matrix vesicle annexins exhibit proteolipid-like properties. Selective parti
A; Reference number: A40404; MUID:91244852; PMID:2037607
F;71,76/Binding site: calcium, low affinity (Leu, Glu) #status predicted F;98,100,102,142/Binding site: calcium, high affinity (Leu, Gly, Gly, Asp) #status pr F;257,259,261,301/Binding site: calcium, high affinity (Met, Gly, Gly, Asp) #status p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Accession: A35381
A;Molecule type: mRNA
A;Residues: 1-31 <FRSA
A;Cross-references: GB:M30971; GB:J03194; NID:g211138; PIDN:AAA48591.1; PID:g211139
A;Cross-references: GB:M30971; GB:J03194; NID:g211138; PIDN:AAA48591.1; PID:g211139
B;Fernandez. M.P.; Selmin, O.; Martin, G.R.; Yamada, Y.; Pfaeffle, M.; Deutzmann, R.; J. Biol. Chem. 263, 5921-5925, 1988
A;Title: The structure of anchorin CII, a collagen binding protein isolated from chon A;Reference number: A28623; MUID:88186917; PMID:2833522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Status: preliminary
A;Molecule: type: profesor
A;Residues: 6-20;85, X',87-88, X',90-93, X',95-96,'XX',99-100,'X',102-103,'XX',106-10
C;Comment: Annexins undergo reversible, calcium-dependent binding to membrane phospho
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Boustead, C.M.; Brown, R.; Walker, J.H.
Blochem, J. 291, 601-608, 1993
A;Title: Isolation, characterization and localization of annexin V from chicken liver
A;Reference number: $32523; MUID:93249384; PMID:8484740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Я.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               growth plate cartilage (matrix vesicle-enriched mic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N'Alternate names: anchorin CII; endonexin II; lipocortin V; placental anticoagulant C; Species: Gallus gallus (chicken) C; Decies: Gallus gallus (chicken) C; Date: 30.5ep-1992 #sequence_revision 30.5ep-1992 #text_change 02-Jun-2000 C; Accession: A35381; A28623; B40404; S32523; S08771 F; Fernandez, M.P.; Sellin, O.; Martin, G.R.; Yamada, Y.; Pfaeffle, M.; Deutzmann, R.; Diol. Chem. 265, 8344, 1990 A; Reference number: A35381; MUID:90243721; PMID:2159478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      242
                                                                                                                                                                                                                                                                                                                                                                                                                                                         122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   302
                                                                                                                                                                                                                                                                                                                                                                                             72 LLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRA 131
                                                                                                                                                                                                                                                                                                                             62
                                                                                                                                                                                                                                                                   7,1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      243 RSIPAYLAETLYYAMKGAGTDDHTLIRVIVSRSEIDLFNIRKEFRKNFATSLYSMIKGDT
                                                                                                                                                                                                                                                                                                     3 LRGTVTDFSGFDGRADAEVLRKAMKGLGTDEDSILNLLTARSNAQRQQOIAEEFKTLFGRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         132 IKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGE
                                                                                                                                                                                                                                                                   12 LRGIVIDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RSIPAYLAETLYYAMKGAGTODHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDT
                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                   ï
                                                                                                                                   DB 1; Length 319;
                                                                                                                                                                                                   Indels
                                                                                                                                                                                                13;
                                                                                                                                88.8%; Score 1455.5; DB 191.8%; Pred. No. 3.6e-86; tive 12; Mismatches 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SGDYKKALLLCGGEDD 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SGDYKKALLLL-SGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Experimental source: epiphyseal
                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: protein
A; Residues: 188-199 <GEN>
                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  - chicken
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Contents: erratum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Accession: S32523
                                                                                                                                                                                                291;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                303
                                                                                                                                                                                                                                                                                                                                                                                                                                                         63
                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                Matches
```

Ą

```
A; Modecule type: protein
A; Residues: 2-299;307-314;320-445;447-549;581-673 < YOS>
R; Hayashi, H.; Owada, M.K.; Sonobe, S.; Kakunaga, T.
B. Holl. Chem. 264, 1722-17230, 198
A; Tille: Characterizations of two distinct Ca(2+)-dependent phospholipid-binding prot A; Reference number: A34459; MUID:90008880; PMID:2529258
        A) Residues: 103-113;167-172, 'X', 174-177;232-235,'F',237-240;251-258;277-281;359-362,'A;Note: the sequence from Fig. 6 is inconsistent with that from Fig. 4 in having 619-A;Note: eight calcium ions are bound in the presence of phospholipid F;Suedhof, T.C.; Slaughter, C.A.; Leznicki, I.; Barjon, P.; Reynolds, G.A. Proc. Natl. Acad. Sci. U.S.A. 85, 664-668, 1988
A;Title: Human 67-kDa calelectrin contains a duplication of four repeats found in 35-A;Reference number: A31079; MUID:88124902; PMID:2963335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Molecule type: protein
A; Residues: 90-108, 'L', 'L', '110-126;127, 265-276; 286-302; 626-654 <AHN>
A; Residues: 90-108, 'L', 'L', '110-126;127, 265-276; 286-302; 626-654 <AHN>
B; Hyatt, S.L.; Liao, L.; Chapline, C.; Jaken, S.
Biochemistry 33, 1223-1228, 1994
A; Title: Identification and characterization of alpha-protein kinase C binding protein A; Reference number: A53507; MUID: 94153907; PMID: 8110754
A; Accession: A53507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A.Cross-references: GDB:119681; OMIM:114070
A:Map position: 5q32-5q34
C.Superfamily: annexin VI; annexin repeat homology
C.Superfamily: annexin VI; annexin repeat homology
C.Steywords: acetylated amino end; calcium binding; duplication; endonexin fold; phosp
F;2-673/Product: annexin VI #status experimental <MAT>
F;24-673/Product: annexin repeat homology <AXI>
F;34-50/Region: endonexin fold #status predicted
F;5-166/Domain: annexin repeat homology AXX2>
F;106-122/Region: endonexin fold #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: protein
A; Residues: 10-25:69-75:136-151;192-207;209-220;300-306 <HAY>
A; Residues: 10-25:69-75:136-151;192-207;209-220;300-306 <HAY>
A; Experimental source: placenta source: 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Reference number: JX0091; MUID:90236978; PMID:2139657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               F;602-673/Domain: annexin repeat homology <Ax8>
F;613-629/Region: endonexin fold #status predicted
F;2/Modified site: acetylated amino end (Ala) (in mature form) #status experimental
                                                                                                                                                                                                                                                                                                                              A; Molecule type: mRNA
A; Residues: 1-225, MK', 228-554, T', 556-673 <SUE>
A; Cross-references: GB:J03578; NID:g179975; PIDN:AAA35656.1; PID:g179976
A; Cross-references: GB:J03578; NID:g179975; PIDN:AAA35656.1; PID:g179976
B:Yoshizaki. H; Mizoguchi, T.; Arai, K.; Shiratsuchi, M.; Shidara, Y.; Maki, J. Blochem. 107, 43-50, 1990
A; Title: Structure and properties of calphobindin II, an anticoagulant protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Molecule type: protein
A;Residues: 'X',473-480,'DY' <HYA>
C;Comment: This abundant cytosolic protein binds to the inner surface of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Reference number: A92696; MUID: 89066652; PMID: 2974032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 932; DB 1;
Pred. No. 3.1e-52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      endonexin fold #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             endonexin fold #status predicted annexin repeat homology <AX6>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        endonexin fold *status predicted
annexin repeat homology <AX4>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   178-250/Domain: annexin repeat homology <AX3>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       F;366-437/Domain: annexin repeat homology <AX5> F;377-393/Region: endonexin fold #status predic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    homology <AX7>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           endonexin fold
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         repeat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          endonexin fold
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 58.18
Matches 183; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         annexin
                                                                                                                                                                                                                                                                                                     A; Accession: A31079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Accession: B34459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Accession: B31953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    90-206/Region:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  65-281/Region:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      438-509/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               449-465/Region:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         254-325/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              538-554/Region:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Gene: GDB: ANX6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C; Genetics:
C;Species: Homo sapiens (man)
C;Date: 31-Mar-1992 #sequence_revision 30-Sep-1992 #text_change 08-Dec-2000
C;Date: 31-Mar-1992 #sequence_revision 30-Sep-1992 #text_change 08-Dec-2000
C;Accession: JU0032; S00263; S18519; A31079; JX0091; B34459; B31953; A53507
R;Iwasaki, A.; Suda, M.; Matanabe, M.; Nakao, H.; Hattori, Y.; Nagoya, T.; Saino, Y.; St J. Blochem. 106, 43-49, 1989
A;Title: Structure and expression of cDNA for calphobindin II, a human placental coagule
A;Reference number: JU0032; MUID:89380132; PMID:2528841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Title: Primary structure of the human, membrane-associated Ca(2+)-binding protein p68 A;Reference number: S00263; MUID:88196081; PMID:3258820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Molecule type: mRNA
A;Residues: 1-673 <TWA>
A;Cross-references: EMBL:D00510; NID:g219550; PIDN:BAA00400.1; PID:g219551
R;Crompton, M.R.: Ovens, R.J.: Totty, N.F.; Moss, S.E.; Waterfield, M.D.; Crumpton,
EMBO J. 7, 21-27, 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ELRAIKQVY EEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              annezin VI [validated] - human
N;Alternate names: calcium-binding protein, 68K; calelectrin; calphobindin II
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Molecule type: mRNA
Ryeaidues: 1-618, D', 620-673 <CR1>
A;Cross-references: EMBL:Y00097; NID:935217; PIDN:CAA68286.1; PID:935218
A;Accession: S18519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 321;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
78.0%; Score 1279; DB 1; Length 3
Best Local Similarity 78.1%; Pred. No. 7.3e-75;
Matches 250; Conservative 38; Mismatches 32; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   308 KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Accession: JU0032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AQHU6B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
```

O

Ξ

EGE

cell

ö 52; Mismatches

Length 673

ហ

Page

```
A; Molecule type: protein
A; Residues: 29-58;101-126;282-310 <AHN>
R; Tatt, J.F.; Sakata, M.; McMullen, B.A.; Miao, C.H.; Funakoshi, T.; Hendrickson, L.E
Biochemistry 27, 6268-6276, 1988
A; Title: Placental anticoagulant proteins: isolation and comparative characterization
A; Reference number: A90534; MUID:89118212; PMID:2975506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      duplication; endonexin fold; glyco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the phospholipas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Status: preliminary
A;Notacus type: mRNA
A;Cross-references: EMBL:M19383; NID:g189616; PIDN:AAC41689.1; PID:g189617
A;Cross-references: EMBL:M19383; NID:g189616; PIDN:AAC41689.1; PID:g189617
A;Cross-references: EMBL:M19383; NID:g189616; PIDN:AAC41689.1; PID:g189617
A;Title: Sedimentation equilibrium analysis of five lipocortin-related phospholipase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C; Species: Homo sapiens (man)
C; Species: Homo sapiens (man)
C; Date: 30-7an-1993 #sequence_revision 26-May-1994 #text_change 22-Jun-1999
C; Accession: A42077; B42077; B707434; A31953; A31046
R; Talt, J.F.; Smith, C.; Frankenberry, D.A.; Miao, C.H.; Adler, D.A.; Disteche, C.M. Genomics 12, 313-318, 1992
A; Title: Chromosomal mapping of the human annexin IV (ANX4) gene.
A; Reference number: A42077; MUID:92155721; PMID:1346776
                                                                                                                                                                                                                                                                                                                                                                                                                                               N;Alternate names: endonexin I; placental anticoagulant protein II; PP4-X protein
                                                                                                      252
                                                                                                                                              250
                                                                                                                                                                                                               133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL
                                            SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                        KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEOLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A.Cross-references: GB:M82809; NID:g178698; PIDN:AAA51740.1; PID:g178699 A.Accession: B42077
A.Accession: B42077
A.Molecule type: DNA
A.Residues: 87-129 <7A2>
R.Schudmann, U.; Amann, E.; Abel, K.J.; Kuepper, H.A.
Behring Inst. Mitt. 82, 59-67, 1988
A.Title: Isolation and expression of cDNA coding for a new member of the A.Recession: S07434; MUID:88309022; PMID:2970257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Reference number: A92696; MUID:89066652; PMID:2974032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C.Superfamily: annexin I; annexin repeat homology C.Keywords: acetylated amino end; calcium binding; F;2-321/Product: annexin IV *status predicted <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 F;19-90/Domain: annexin repeat homology <AXI>F;30-46/Region: endonexin fold #status predicted F;91-162/Domain: annexin repeat homology <AX2>F;102-118/Region: endonexin fold #status predicted F;174-246/Domain: annexin repeat homology <AX3>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: protein
A; Residues: 4-17;30-74;102-146;283-321 <TA3>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: GDB:131395; OMIM:106491
                                                                                                                                                                                                                                                                                                     |:|||||| | | | ||
311 GEYKKALLKICGGDD 325
                                                                                                                                                                                                                                                                             GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Map position: 2p13-2p13
A; Introns: 102/3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: mRNA
A; Residues: 1-321 <TAI>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Accession: A31953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Accession: A31046
                                                                                                                                                                                                                                                                                                                                                                                                                              annexin IV - human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Gene: GDB: ANX4
                                                                                                                                                                                          253
                                                                                                                                                                                                                                     251
                                                                                                                                                                                                                                                                             313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C; Genetics:
                                                                                                                                                                                          ö
                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                   g
                                                            셤
                                                                                                        ð
                                                                                                                                              8
                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               F;2/Modified site: acetylated amino end (Ala) (in mature form) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                     SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                       251 STPEYFAERLERAAMKGLGTRDWTLIRIWVSRSELDMLDIREIFRTKYEKSLYSMIKNDTS 310
                                                                                                                                              133 KOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   70
11 RGSVHDFPEFDANQDAEALYTAWKGFGSDKESILELITSRSNKQRQEICQSYKSLYGKDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  56.9%; Score 932; DB 1; Length 67 59.0%; Pred. No. 3.1e-52; 1ve 49; Mismatches 80; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     endonexin fold *status predicted
annexin repeat homology <AX8>
endonexin fold *status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       527-598/Domain: annexin repeat homology <AX7>538-554/Region: endonexin fold *status predic
                                                                                                                                                                                                                                                                                                                                                                                                                              1:11 || || || || 311 || 325
                                                                                                                                                                                                                                                                                                                                                                                                       GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 59.09
Matches 186; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           538-554/Region:
602-673/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   613-629/Region:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           73
                                                                                                                                                                                                                                                                                                                     253
                                                                                                                                                                                                                                                                                                                                                                                                       313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               q
                                                                                                    음
                                                                                                                                            ò
                                                                                                                                                                                  ద
                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                           음
                                                                                                                                                                                                                                                                                                                                                                                                       ç
                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             å
                                                              ò
```

ပ

```
RiFan, H.; Josic, D.; Lim, Y.P.; Reutter, W. Eur., J. Blochem. 230, 741-751, 1995
Eur., J. Blochem. 230, 741-751, 1995
A; Title: cDNA cloning and tissue-specific regulation of expression of rat calcium-bin
A; Reference number: 865683; MUID:95331313; PMID:7607247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           endonexin fold; membrane-associate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 :613-629/Region: endonexin fold #status predicted :2/Modified site: acetylated amino end (Ala) (in mature form) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        253
                                                                                                                                                                                                                                                                                                    254 IPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG 313
                                                                                                                                                                                                                                                                                                                                                                                                     KOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     70
        GTVKAASGFNAAEDAQTLRKAMKGLGTDEDAIISVLAYRSTAQRQEIRTAYKSTIGRDLL 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C.Species: Rattus norvegicus (Norway rat)
C.Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 10-Sep-1999
C.Accession: S65683; S52844
                                                           DDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIK
                                                                                                                                                                  QVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGELK
                                                                                                                                                                                                                                                                      WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11 RGSVHDFADFDANQDAEALYTAMKGFGSDKESILELITSRSNKORQEICQSYKSLYGKDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Molecule type: mRNA
A;Residues: 1-673 <FAN>
A;Cross-references: EMBL:X86086; NID:g763180; PIDN:CAA60040.1; PID:g763181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 82;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match 56.2%; Score 921; DB 1; Best Local Similarity '58.7%; Pred. No. 1.6e-51; Matches 185; Conservative 48; Mismatches 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A'Experimental source: liver
C;Superfamily: annexin VI; annexin repeat homology
C;Keywords: acetylated amino end; calcium binding;
F;2-673/Product: annexin VI #status predicted <MAT>
F;23-94/Domain: annexin repeat homology <AXI>
F;34-50/Region: endonexin fold *status predicted
F;95-166/Domain: annexin repeat homology <AXI>
F;06-122/Region: endonexin fold *status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                annexin repeat homology <AX4>
endownin repeat homology <AX4>
endownin fold #starus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    homology <AX5>
#status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                endonexin fold #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   *status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N;Alternate names: calcium-binding protein 65/67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             F;178-250/Domain: annexin repeat homology <AX3> F;190-206/Region: endonexin fold *status predict
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  F;438-509/Domain: annexin repeat homology <Ax6>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           homology <Ax7>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              602-673/Domain: annexin repeat homology <AX8>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ||:| ||:| || || DYRKVLLILCGGDD 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   endonexin fold
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 314 DYKKALLLISGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           annexin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        F;190-206/Region:
F;254-325/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                F;449-465/Region:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           527-598/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   538-554/Region:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   annexin VI - rat
                                                                                                                                                                  134
                                                                                                                                                                                                                                                                      194
                                                                                                                                                                                                                                                                                                                         185
                                                              à
                                                                                                            셤
                                                                                                                                                                  ò
                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Molecule type: protein
A;Residues: 1-118 <AREB>
Experimental source: intestinal epithelium
C;Comment: Annexins undergo reversible, calcium-dependent binding to membrane phospholif derstood.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C; Superfamily: annexin I; annexin repeat homology
C; Reywords: blocked amino end; calcium binding; duplication; endonexin fold; glycoproted
E;16-87, Domain: annexin repeat homology <AXI>
F;27-43/Region: endonexin fold #status precited
E;88-159/Domain: annexin repeat homology <AXI>
F;99-115/Region: endonexin fold #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Naternate names: 32K calelectrin; chromobindin IV; endonexin; lipocortin IV; protein I (Species: Sus scrofa domestica (domestic pig) (C.Species: Sus scrofa domestica (domestic pig) (C.Spate: 30-Sep-1992 #sequence_revision 30-Sep-1992 #text_change 24-Nov-1999 (C.Saccession: A27107 R.Weber, K.; Johnsson, N.; Plessmann, U.; Van, P.N.; Soling, H.D.; Ampe, C.; Vandekerckh R.HENG J. 6, 1599-1664, 1987 A.Title: The amino acid sequence of protein II and its phosphorylation site for protein A; Reference number: A27107; WUID:87275850; PMID:2956093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          F;171-243/Domain: annexin repeat homology <ax3.
F;183-199/Region: endonexin fold #status predicted
F;247-318/Domain: annexin repeat homology <ax4.
F;256-274/Region: endonexin fold #status predicted
F;256-274/Region: endonexin fold #status predicted
F;17/Modified site: blocked amino end (Ala) (probably acetylated) #status experimental
F;6/Binding site: phosphate (Thr) (covalent) (by protein kinase C) #status predicted
F;124,244/Binding site: carbohydrate (Asn) (covalent) *status predicted
F;186-202/Region: endonexin fold *status predicted
F;250-321/Domain: annaxin repeat homology <AX4>
F;251-277/Region: endonexin fold *status predicted
F;27/Nodified site: acctylated amino end (Ala) (in mature form) #status predicted
F;9/Rinding site: phosphate (Thr) (covalent) (by protein kinase C) *status predicted
F;247/Rinding site: carbohydrate (Asn) (covalent) *status predicted
                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                             |||||| ||:||: :|: :|| |||:| || ||:| ||||:| ||||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| ||:|| WGTDEVKFLTVLCSRNRNHLLHVPDEYKRISQKDIEQSIKSETSGSFEDALLAIVKCMRN 247
                                                                                                                                                                                                                                                                                                                                                                                                     DDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIK 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGELK 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      73
                                                                                                                                                                                                                                                                                              14 GTVTDPPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL 73
                                                                                                                                                                                                                                                                                                                         254 IPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSĞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14 GTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                       56.3%; Score 923; DB 1; Length 321;
58.3%; Pred. No. 4.7e-52;
1ve 53; Mismatches 78; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 318;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                79; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             56.2%; Score 921; DB 1;
58.6%; Pred. No. 6.2e-52;
1ve 51; Mismatches 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DYKKALLLESGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ||:| ||:| || || || DYRKVLLVLCGGDD 321
                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 58.65
Matches 184; Conservative
                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                Best Local Simi
Matches 183;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     annexin IV - pig
                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                  7.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                      68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     314
                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

	Qy 74 DDLKSELTGREKLIVALMRPSRLYDAYELKHALKGAGTNEKVLTEITASRTPEELRAIK 133
RESULT 10 LUBO4 annexin IV - bovine N.Alternate names: 32K calelectrin; chromobindin IV; endonexin; lipocortin IV; protein I C; Species: Bos primigenius taurus (cattle)	QY 314 DYKKALLILSGEDD 327
C; Date: 30-Sep-1992 #sequence_revision 30-Sep-1992 #text_change 22-Jun-1999 C; Accession: A31578; D45066; S59624; A45066; R45066; F45066; F45066; G45066; H45066 C; Accession: A31578; D45066; S59624; A45066; B45066; F45066; F45066; G45066; H5066;	K lipid-dependent Ca2+-binding protein lus (chicken) sequence_revision 20-Aug-1994 #text_change 17-Mar-1999
A; Residues: 1-319 < HANN A; Cross references: GB: X13627; NID:g215; PIDN: CAA31954.1; PID:g216; GB: M22248; NID:g1636 A; Cross references: GB: X13627; NID:g215; PIDN: CAA31954.1; PID:g216; GB: M22248; NID:g1636 B; Kojima, K.; Ogawa, H.K.; Seno, N.; Yamamoto, K.; Irimura, T.; Osawa, T.; Matsumoto, I. J. Biol. Chem. 267, 2036-20539, 1992 A; Title: Carbohydrate-binding proteins in bovine kidney have consensus amino acid sequence A; Reference number: A45066; MUID:93015942; PMID:1400371	R;Cao, X.; Genge, B.R.; Wu, L.N.Y.; Buzzi, W.R.; Showman, R.M.; Wuthler, R.E. Blochem. Blophys. Res. Commun. 197, 556-561, 1993 A;Title: Characterization, cloning and expression of the 67-kba annexin from chicken A;Reference number: JC2029; MUID:94092130; PMID:8267590 A;Accession: JC2029 A;Accession: JC2029 A;Accession: JC2029
• (1	ding, phospholipid repeat homology <a <a="" <i="" homology="" homology<="" in="" n="" repeat="" td="">
A:Title: Ca(4*)-dependent Dinding of annexin 1V to surfactant protein A and lamellar bod A:Reference number: \$59624; MUID:96077142; PMID:7492310 A:Accession: \$59674 A:Accession: \$59674 A:Status: preliminary A:Molecule type: protein A:Residues: 29-44;72-77;112-119;163-180;181-190;226-235 <soh></soh>	F;523-59//Domain: annexin repeat homology <ax></ax> F;601-671/Domain: annexin repeat homology <ax8> Query Match 54.7%; Score 896.5; DB 2; Length 671; Best Local Similarity 57.7%; Pred. No. 5.8e-50; Matches 184; Conservative 51; Mismatches 83; Indels 1; Gaps 1;</ax8>
derstood. C;Superfamily: annexin I; annexin repeat homology C;Seywords: calclum binding; duplication; endonexin fold; glycoprotein; phospholipid bin F;2-319/Product: annexin repeat homology <axi> F:17-88/Domain: annexin repeat homology <axi> F:28-44/Reqion: endonexin fold status predicted</axi></axi>	OY 10 OVLRGTVTDFPGFDERADAETLERKAMKGLGTDEESILTLITSRSNAQROEISAAFKTLFG 69
F.89-160/Domain: annexin repeat homology <ax2> F:100-116/Region: endonexin fold #status predicted F:172-244/Domain: annexin repeat homology <ax3> F:184-200/Region: endonexin fold #status predicted F:248-119/Domain: annexin repeat homology <ax4></ax4></ax3></ax2>	Db 66 KDLIADLKYELTGKFERLIVSLMRPPAYSDAKEIKDAIAGIGTDEKCLIEILASRTNQEI 125 Qy 130 RAIKQYYEEEYGSSLEDDVVGDTSGYYQRMLVYLLQANRDPDAGIDEAQVEQDAQALFQA 189 : :
F:27-17.97 endoment note status predicted F:77Binding site: phosphate (Thr) (covalent) (by protein kinase C) *status predicted F:125,245/Binding site: carbohydrate (Asn) (covalent) *status predicted Query Match 55.8%; Score 914; DB 1; Length 319;	QY 190 GELKWGTDEEKEITIEGTRSVSHLRKVFDKYMTISGEOIEETIDRETSGNLEQLLLAVVK 249
<pre>Similarity 58.0%; Pred. No. 1.8e-51; 2: Conservative 51; Mismatches 81; Indels 0; Gaps GTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL </pre>	QY 250 SIRSIPAYLAETLYYAWKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKG 309 1
DD 6 GTVKAASGFNAAEDAQTLKKAMKGLGTDEDAIINVLAYKSTAQRQEIRTAYKTTIGRDLM 65	

硆

```
A. Reference number: $23447
A. Reference number: $23447
A. Molecule type: mRNA
A. Residues: 1-505 < TON>
A. C. A. : Welssbach, L.; Treadwell, B.V.
Biochim. Biophys. Acta 1131, 223-226, 1992
A. Towle. C. A. : Welssbach, L.; Treadwell, B.V.
Biochim. Biophys. Acta 1131, 223-226, 1992
A. Title: Alternatively spliced annexin XI transcripts encode proteins that differ nea A: Reference number: $36136; MUID: 92305067; PMID: 1535225
A. Accession: $36136
A. Molecule type: mRNA
A: Residues: 1-77 < TO2>
A. Cross-references: EMBL: 211742
C. Comment: Annexins undergo reversible, calcium-dependent binding to membrane phospho
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 duplication; endonexin fold; glyco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            193 KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIPAYLAETLYYAMKGAGTDDHTLIRVWVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         72
                                                                                                                                       C; Date: 22-Nov-1993 #sequence_revision 10-Feb-1995 #text_change 22-Jun-1999 C; Accession: $23447; $36136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Grantics in the state of introns is incomplete
C:Genetics:
A:Introns: 19/1; 58/2
A:Introns: 19/2; 58/2
C:Superfamily: annexin repeat homology AXI2
F:214-230/Region: endonexin fold *status predicted
F:215-346/Domain: annexin repeat homology AXI2>
F:358-330/Region: endonexin fold *status predicted
F:370-386/Region: endonexin fold *status predicted
F:434-505/Domain: annexin repeat homology AXI3>
F:434-505/Domain: annexin repeat homology AXI3>
F:445-461/Region: endonexin fold *status predicted
F:61,113/Binding site: carbohydrate (Asn) (covalent) *status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 505;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        annexin XI - rabbit
An Alternate names: calcyclin-associated annexin protein CAP-50
C; Species: Oryctolagus cuniculus (domestic rabbit)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            y Match 52.8%; Score 865; DB 1; Length 50 Local Similarity 54.9%; Pred. No. 4.3e-48; hes 173; Conservative 58; Mismatches 84; Indels
                                                                                                                          C; Species: Bos primigenius taurus (cattle)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |||:| || : | :|
GDYRKILLKICGGND 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GDYKKALLLEGEDD 327
                                                                                             annexin XI form B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best_Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Molecule type: protein
A; Residues: 213-223, X', 225-226;319-325, 'G', 327-328, 'X', 330-333, 'Q', 335-339;441-450, 'X',
A; Experimental source: lung
A; Note: sequence modified after extraction from NCBI backbone
C; Comment: Annexins undergo reversible, calcium-dependent binding to membrane phospholig
                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: mRNA
A; Residues: 1-503 <-rown
A; Residues: 1-503 <-rown
A; Cross-references: GB: MB2802; NID:g162673; PIDN: AAA30379.1; PID:g162674
A; Note: the authors did not translate the codon GAC for residue 503
B; Mizutani, A.; Usuda, N.; Tokumitsu, H.; Minami, H.; Yasui, K.; Kobayashi, R.; Hidaka,
A; Mizutani, A.; Usuda, N.; Tokumitsu, H.; Minami, H.; Yasui, K.; Kobayashi, R.; Hidaka,
A; Mitle: CAP-50, a newly identified annexin, localizes in nuclei of cultured fibroblast
A; Reference number: A42909; MUID:92317074; PMID:1618851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        fold; glycoprotein; phospholipid bin
                                                                                                                                                                       NiAlternate names: calcyclin-associated protein peptide, CAP-50
C; Species: Bos primigenius taurus (cattle)
C; Date: 31-Mar-1993 sequence_revision 31-Mar-1993 *text_change 22-Jun-1999
C; Accession: A41131; A42909; C42909; D42909
B; Towle, C.A.; Treadwell, B.V.
J. Biol. Chem. 267, 5416-5423, 1992
A; Title: Identification of a novel mammalian annexin. cDNA cloning, sequence analysis, A; Accession: A42113; MUID:92184796; PMID:1372001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVILLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEGLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Introns: 19/1; 56/2
A; Note: the list of introns is incomplete
C; Superfamily; annexin repeat homology
C; Superfamily; annexin repeat homology
C; Reywords: calcium binding; duplication; endonexin fold; glycoprotein;
F; 201-272/Domain: annexin repeat homology <AX1>
F; 212-228/Region: endonexin fold *status predicted
F; 273-344/Domain: annexin repeat homology <AX2>
F; 286-384/Region: endonexin fold *status predicted
F; 356-428/Domain: annexin repeat homology <AX3>
F; 368-348/Region: endonexin fold *status predicted
F; 358-350/Romain: annexin repeat homology <AX4>
F; 443-503/Domain: annexin repeat homology <AX4>
F; 443-603/Domain: annexin fold *status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 503;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; DB 1; Lc..
. 4.3e-48;
. 84; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match 52.8%; Score 865; DB Best Local Similarity 54.9%; Pred. No. 4.3e-Matches 173; Conservative 58; Mismatches
DTSGEYKKALLKLCEGDDD 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GDYKKALLLISGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |||:| || : | :|
GDYRKILLKICGGND 503
                                                                                                                                                       form A · bovine
306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           489
```

à a 셤

ò

ద

ö

g

õ 음 ð g

õ

```
fold; glycoprotein; phospholipid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  253 SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KQVYEEEYGSSLEDDVVGDTSGYYORMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            193 KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                  A;Cross-references: GB:L19605; NID:g457128; PIDN:AAA19734.1; PID:g457129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 505;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      96;
                                                                                                                                                                                                                                                                                                                     A.Map position: 9q11-9q22
C.Superfamily: annexin VII; annexin repeat homology
C.Keywords: calcium binding; duplication; endonexin
F:203-274/Domain: annexin repeat homology <AXI>F:275-346/Domain: annexin repeat homology <AXI>F:358-430/Domain: annexin repeat homology <AXI>F:358-430/Domain: annexin repeat homology <AXI>F:434-505/Domain: annexin repeat homology <AXI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                52.2%; Score 855; DB 2;
53.3%; Pred. No. 1.9e-47,
iive 61; Mismatches 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           completed: August 22, 2003, 21:36:12 ne : 17 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                   A:Cross-references: GDB:313076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GDYRKILLKICGGND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
nes 168; Conserv
                                                                                         A; Molecule type: mRNA
A; Residues: 1-505 <MIS>
                                                                 A;Status: preliminary
                       A; Accession: A53152
                                                                                                                                                                                                                                                    A; Gene: GDB: ANX11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Search co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 合
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ογ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A.Molecule type: protein
A.Residues: 104-141;213-223, 'X',225-231;254-263;271-280;285-291,'X',293-300,'X',302-309;
C.Comment: This protein binds specifically to calcyclin in a Ca2+ dependent manner.
C.Superfamily: annexin VII; annexin repeat homology for glycoprotein; phospholipid bin C.Reywords: calclum binding; duplication; endonexin fold; glycoprotein; phospholipid bin F:201-272/Domain: endonexin fold #status predicted
F:201-272/Domain: endonexin fold #status predicted
F:273-344/Domain: annexin repeat homology <AXI>
F:356-428/Domain: annexin repeat homology <AXI>
F:368-384/Region: endonexin fold #status predicted
F:482-503/Domain: annexin repeat homology <AXI>
F:368-303/Domain: annexin repeat homology caxi>
F:368-363/Domain: annexin repeat homology caxi>
F:443-678-69ion: endonexin fold #status predicted
F:433-678-69ion: endonexin fold #status predicted
F:58/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: protein
A; Residues: 104-141;213-231;254-262;270-280;285-309;319-337;429-448;478-492 <TK2>
A; Residues: 104-141;213-231;254-262;270-280;285-309;319-337;429-448;478-492 <TK2>
A; Tyrokumitasu, H.; Mizuteni, A.; Minami, H.; Kobayashi, R.; Hidaka, H.
J. Biol. Chem. 267, 8919-8924, 1992
A; Title: A calcyclin associated protein is a newly identified member of the Ca(2+)/phosp
A; Reference number: A38250; MUID:92250478; PMID:1533622
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 16-Jun-2000 C;Accession: JH0694; PH0950; A38250; PS0263 R;Tokumitsu, H.; Mizutani, A.; Muramatsu, M.; Yokota, T.; Arai, K.; Hidaka, H. Biochem Biochem
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LDDLKSELTGRFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            133 KQYYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    193 KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLENIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C;Species: Homo sapiens (man)
C;Date: 07-Jul-1995 #sequence_revision 07-Jul-1995 #text_change 13-Aug-1999
C;Accession: A53152
R;Misaki, Y.; Pruiljn, G.J.M.; van der Kemp, A.W.C.M.; van Venrooij, W.J.
J; Biol. Chem. 269, 4240-4246, 1994
A;Title: The 56K autoantigen is identical to human annexin XI.
A;Reference number: A53152; MUID:94140847; PMID:7508441
                                                                                                                                                                                                                                                                           A;Molecule type: mRNA
A;Residues: 1-503 <TOK>
A;Cross-references: DDBJ:D10883; NID:g471147; PIDN:BAA01705.1; PID:g471148
A;Experimental source: lung
A;Accession: PH0950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 503;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             84; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tch 52.7%; Score 863; DB 1; al Similarity 54.3%; Pred. No. 5.7e-48; 171; Conservative 60; Mismatches 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GDYRKILLKICGGND 503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Accession: A38250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   annexin XI - human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
Matches 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     đ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  õ
```

370 252

72

Gaps

0;

OMBE BLANK (USPTO)

```
GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
```

OM protein - protein search, using sw model

August 22, 2003, 21:28:42; Search time 8.66667 Seconds (Without alignments) 1774.354 Million cell updates/sec Run on:

Title: Perfect score: Sequence:

US-09-970-969-2 1639 1 MACGGGHMAQVLRGTVTDFP......KGDTSGDYKKALLLLSGEDD 327

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

127863 seqs, 47026705 residues Searched: Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

SwissProt_41:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	P08758 homo sapien	u	mus	89	P17153 gallus gall	cynops	homo sa		. P09525 homo sapien	s sns a	P48037 rattus norv	P97429 mus musculu			P51901 gallus gall	rattus	P27214 bos taurus	P33477 oryctolagus		P97384 mus musculu	035640 mus musculu	рошо	рошо	mus n	P20073 homo sapien	Q07076 mus musculu	P14669 rattus norv	P79134 bos taurus	P26256 hydra atten	Q92125 xenopus lae	P22464 drosophila	355	P04272 bos taurus	
SUMMARIES	CI	ANX5_HUMAN	ANX5_BOVIN	ANX5_MOUSE	ANX5_RAT	ANX5_CHICK	ANX5_CYNPY	ANX6_HUMAN	ANX6_MOUSE	ANX4_HUMAN	ANX4_PIG	ANX6_RAT	ANX4_MOUSE	ANX4_BOVIN	ANX4_CANFA	ANX6_CHICK	ANX4_RAT	ANXB_BOVIN	ANXB_RABIT	ANXB_HUMAN	ANXB_MOUSE	ANX8_MOUSE	ANX8_HUMAN	ANX3_HUMAN	ANX3_MOUSE	ANX7_HUMAN	ANX7_MOUSE	ANX3_RAT	ANX6_BOVIN	ANXC_HYDAT	ANX7_XENLA	ANX9_DROME	ANX2_HUMAN	ANX2_BOVIN	
	80	1			-												-	·				-					-	-					1	;	;.
	Query Match Length	319	320	319	318	321	323	672	672	318	318	672	318	318	318	671	318	503	503	505	203	327	327	323	323	466	463	324	618	-	512	\sim	338	338	
	Query Match	9	m	0.3		8.0		-	6.9						5.0	54.7	4.4					1.3		O.		7	7	ζ.	Ġ			'n	ď	2.4	
ď	Ma	6	-	-																		'n		•	-	Ī	•	•	4	4	4	*	4	4	
	Score	8	1536.5	1479.5	1455.5	ď	1090.5	932	932	923	921	921	916	914	901	896.5	891	865	863	855	847	841.5	831.5	802.5	199	779	777	771	761	718	711	701	698.5	694.5	
	Result No.		N	m	*	ហ	9	7	æ	σ		11	12	13		15	16	17	18	19	50	21	22	23	24	25	36	27	28	29	30	31	32	33	

			P17785 gallus gall P24801 xenopus lae		
ANX2_RAT ANX2_MOUSE	ANXX_DROME ANXD_HUMAN	ANXB_XENLA ANXD_CANFA	ANX2_CHICK ANX2_XENLA	ANX1_RABIT ANX1_CAVCU	ANX1_HUMAN ANX1_BOVIN
338 338	320 315	339	338 339	346 346	345 346
42.3	41.8	41.2	40.7	39.6 39.5	39.2 39.2
693.5	685.5	675.5 671	666.5	649 648	643 643
		യസ	о н	OI M	# 10

ALIGNMENTS

RESULT 1 ANXS_LUNAN ANXS_LUNAN DT 01-NO DT 01-NO DT 10-NO DT 10-NO DT 10-NO DT 10-NO DE (CBP- DE (CAP- DE (Anch ANXA) COC MARMA COC MARM
--

```
RECORD STATE OF STATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Sedimentation equilibrium analysis of five lipocortin-related phospholipase A2 inhibitors from human placenta. Evidence against a mechanistically relevant association between enzyme and inhibitor.";
                                                                  Kaplan R., Jaye M., Burgess W.H., Schlaepfer D.D., Haigler H.T.; "Cloning and expression of cDNA for human endonexin II, a Ca2+ and phospholipid binding protein."; J. Biol. Chem. 263:8037-8043(1988).
                                                                                                                                                                                                               Fernandez M.P., Morgan R.O., Fernandez M.R., Carcedo M.T.;
The gene encoding human annexin V has a TATA-less promoter with a
                                                                                                                                                                                                                                                                                                                                         Cookson B.T., Engelhardt S., Smith C., Bamford H.A., Prochazka M.,
Tait J.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEGÜENCE OF 84-92.
MEDILNE-89066652; PubMed-2974032;
Ahn N.G., Teller D.C., Blenkowski M.J., McMullen B.A., Lipkin E.W.
de Haen C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rothbut R., Comera C., Cortial S., Haumont P.-Y., Diep Le K.H., Cavadore J.-C., Conard J., Russo-Marie F., Lederer F.; A 32 Kba lipocortin from human mononuclear cells appears to be identical with the placental inhibitor of blood coagulation."; Blochem. J. 263:929-935(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE OF 85-130; 258-296 AND 299-319.
MEDLINE-87317598; PubMed-2957692;
Schlaepfer D.D., Mehlman T., Burgess W.H., Haigler H.T.;
Structural and functional characterization of endonexin II,
calcium and phospholipid-binding protein.";
Proc. Natl. Acad. Sci. U.S.A. 84:6078-6082(1987).
                                                                                                                                                                                                                                                                                                                                                                       'Organization of the human annexin V (ANX5) gene.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     J. Biol. Chem. 263:18657-18663(1988).
[13]
                                                  MEDLINE-88228020; Pubmed-2967291;
                                                                                                                                                                            TISSUE=Lung;
MEDLINE=95047484; PubMed=7958998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE-90088443; PubMed-2532007;
                                                                                                                                                                                                                                                                                                                     MEDLINE-94307733; PubMed-8034319;
Blochem. 102:1261-1273(1987).
                                                                                                                                                                                                                                                                                                                                                                                               Genomics 20:463-467(1994).
                                                                                                                                                                                                                                                                     Gene 149:253-260(1994).
                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PARTIAL SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mechanistically
                                                                                                                                                                                                                                                    high G+C
```

X-RAY CRYSTALLOGRAPHY (2.5 ANGSTROMS)

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit Institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce.or send an email to license@ib-sib.ch).
                                                                                                                                                                                                                                                                                                              X-RAY CRYSTALLOGRAPHY (2.0 ANGSTROMS).
MEDLINE-92177413; PubMed-1311770;
Huber R., Berendes R., Burger A., Schneider M., Karshikov A.,
Luecke H., Roemisch J., Paques E.-P.;
"Crystal and molecular structure of human annexin V after refinement.
Implications for structure, membrane binding and ion channel
formation of the annexin family of proteins.";
J. Mol. Biol. 223:683-704(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEVEN GROUPS UNDER DIFFERENT NAMES!
-1- DATABASE: NAME-R&D Systems' cytokine source book: Annexin 5;
WWWw.rndsystems.com/asp/g_sitebuilder.asp?bodyid=185".
                                                                                                                                                                           Huber R., Schneider M., Mayr I., Roemisch J., Paques E.-P.; "The calclum binding sites in human annexin V by crystal structure analysis at 2.0-A resolution. Implications for membrane binding and realcium channel activity."; FEBS Lett. 275:15-21(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kaneko N., Ago H., Matsuda R., Inagaki E., Miyano M.;
Cryatal structure of annexin V with its ligand K-201 as a calcium
channel activity inhibitor.';
J. Mol. Biol. 274:16-20(1997).
                Huber R., Roemisch J., Paques E.-P.;
"The crystal and molecular structure of human annexin V, an anticoagulant protein that binds to calcium and membranes.";
EMBO J. 9:3867-3874(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               X-RAY CRYSTALLOGRAPHY (3.0 ANGSTROMS).
MEDLINE-98062349; PubMed-9398511;
                                                                                                                                     X-RAY CRYSTALLOGRAPHY (2.0 ANGSTROMS).
                                                                                                                                                          MEDLINE-91085549; PubMed-2148156;
MEDLINE-91065314; PubMed-2147412;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOINED,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; X12454; CAA30985.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAA36166.1; -. BAA00122.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAB59545.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA35570.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAB52386.1;
AAB40047.1;
AAB40047.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAB40047.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAB40047.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAB40047.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAB40047.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAB40047.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       U01691;
U01681;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  U01689;
U01690;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    J03745;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            D00172;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    U01685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         001686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 001687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL;
EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL;
EMBL;
EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL;
EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL;
```

```
01-FEB-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                    MOUSE
                                                                                                                                                                 g
                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                   189
                                                                                              VARIANT
                                                                                                                                                                                                                                                                                                                                                               309
                                                               REPEAT
MOD_RES
VARIANT
                                                                                                                           Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                            P48036
                                                                                                                                                                                                                                                                                                                                                                                                                        ANX5_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT
XXXIIIIII S
                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                 엄
                                                                                                                                                                 ò
                                                                                                                                                                                  g
                                                                                                                                                                                                       δ
                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                               Š
                           ö
                                                                                                                                             180
                                                                                                                                                                AGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVV 248
                                                                                                                                                                                                                KSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIK 308
                                              9
                                                               9
                                              AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLF
                                                                AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLF
                                                                                   GRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEE
                                                                                                                         LRAIKOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQ
                                                                                                                                    15-DEC-1998 (Rel. 37, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Annexin A5 (Annexin V) (Lipocortin V) (Endonatin II) (Calphobindin I)
(CBP-I) (Placental anticoagulant protein I) (PAP-I) (PP4) (Thromboplastin inhibitor) (Vascular anticoagulant-alpha)
                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               for
                                                                                                                                                                                                                                                                                                                                                                                                              Bos taurus (Bovine).
Sukaryota Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Bovidae; Bovinne; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Green B.N., Aitken A., "Novel isoforms of CaBP 33/37 (annexin V) from mammalian brain: structural and phosphorylation differences that suggest distinct biological roles.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE-Brain;
MEDLINE-93041974; PubMed-1420335;
Learmonth M.P., Howell S.A., Harris A.C.M., Amess B., Patel Y., Glambanco I., Blanchi R., Pula G., Ceccarelli P., Donato R.,
                           ó
       Length 319;
                           Indels
        Score 1585; DB 1;
Pred. No. 1.5e-95;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                 320
                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                      GDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                 15-DEC-1998 (Rel. 37, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pfam; PF00191; annexin; 4.
PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         interPro; IPR001464; Annexin.
       96.78;
                Local Similarity 99.7
nes 318; Conservative
                                                                                                                                                                                                                                                                                                                STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SMART; SM00335; ANX; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PIR; S27214; S27214.
HSSP; P08758; 1ANW.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=9913;
                                                                                                                                                                                                                                                                                                                                                                                            Anchorin CII).
                                                                                                                                                                                                                                                                                                                                                                                                     ANXAS OR ANXS
                                                                                                                                                                                                                                                                                                               ANX5_BOVIN
P81287;
                                                              П
                                                                                   69
                                                                                                                                                               189
                                                                                                                                                                                 181
                                                                                                                                                                                                     249
                                                                                                                                                                                                                       241
                                                                                                                         129
                                                                                                                                                                                                                                            309
                                                                                                                                                                                                                                                              301
                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SECUENCE
        Query Match
                         Matches
                                                                                                                                                                                                                                                                                                                 g
                                                                                  ç
                                                                                                     셤
                                                                                                                        ð
                                                                                                                                         g
                                                                                                                                                             ò
                                                                                                                                                                              g
                                                                                                                                                                                                    ç
                                                                                                                                                                                                                       윱
                                                                                                                                                                                                                                           å
                                                                                                                                                                                                                                                            셤
```

```
128
                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                            129 LRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQ 188
                                                                                                                                                                                                                                                                                                                                                                                                                                            AGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVV 248
                                                                                                                                                                                                                                                                                                              68
                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                   69 GRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-FEB-1996 (Rel. 33, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Annexin A5 (Annexin V) (Lipocortin V) (Endonexin II) (Calphobindin I)
(CBP-I) (Placental anticoagulant protein I) (PAP-I) (PP4)
(Thromboplastin inhibitor) (Vascular anticoagulant-alpha) (VAC-alpha)
                                                                                                                                                                                                                                                                                                                            <u> AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLF</u>
                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ANXAS OR ANXS.

ANSCULUS (Mouse).

Bukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Butheia; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

NCBI_TaxID=10090;
Annexin; Calcium/phospholipid-binding; Repeat; Blood coagulation; Acetylation.

NIT_MET 0 0

REPEAT 23 83

REPEAT 95 155

REPEAT 170

REPEAT 170
                                                                                                                                                                                                                                                                                 ï
                                                                                                                                                                                                                                                     DB 1; Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fernandez
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Adachi T., Kojima K., Fukuoka S.-I., Ogawa H., Matsumoto
Submitted (AUG-1995) to the EMBL/GenBank/DDBJ databases.
                                                                                                                        ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
ACETYLATION (BY SIMILARITY).
                                                                                                                                                                                                                                                   Score 1536.5; DB 1; Length
Pred. No. 2.1e-92;
5; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rodriguez-Garcia M.I., Kozak C.A., Morgan R.O., Fernande: "Mouse annexin V chromosomal localization, cDNA sequence conservation, and molecular evolution.";
                                                                                                                                                                                                                          50FCE18E95F19CB0 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ŕ
                                                                                                                                                                                              .
₹ 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-Peritoneal cavity;
MEDLINE-96422179; PubMed-8824796;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301 GDTSGDYKKALLLCGGEDD 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GDTSGDYKKALLLL-SGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (Rel. 33, Created)
                                                                                                                                                                                           36 S
125 K
35942 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            [3]
SEQUENCE FROM N.A.
STRAIN-129/SvJ; TISSUE-Liver;
                                                                                                                                                                                                                                                     93.78;
                                                                                                                                                                                                                                                                  96.68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Genomics 31:151-157(1996).
                                                                                                                                                                                                                                                                  Best Local Similarity 96.6
Matches 309; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD;
                                                                                                                                                                                                                          320 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       [2]
SEQUENCE FROM N.A.
                                                                                                            23
95
179
254
```

Fri Aug

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.lsb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Gaps
                                                           17. Biochem. 337:125-131(1999).

1- FUNCTION: THIS PROTEIN IS AN ANTICOAGULANT PROTEIN THAT ACTS AS AN INDIRECT INHIBITOR OF THE THROMBOPLASTIN-SPECIFIC COMPLEX, WHICH IS INVOLVED IN THE BLOOD COAGULATION CASCADE.

1- SUBBUNIT: MONOMER, BINDS ATRX (By similarity).

1- DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.

1- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.

1- SIMILARITY: Contains 4 annexin repeats.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PS00223, ANNEXIN; 4.
Annexin; Calcium/phospholipid-binding; Repeat; Blood coagulation;
             Rodriguez-Garcia M.I., Morgan R.O., Fernandez M.R., Bances P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 319;
                                       "Mouse annexin V genomic organization includes an endogenous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     55055BAF2E1C36B7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. 9.9e-89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            90.3%; Score 1479.5; 93.7%; Pred. No. 9.9e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
                                                                                                                                                                                                                                                                                                                                 A230108; CAA13092.1;
A230110; CAA13092.1; JOINED.
A230110; CAA13092.1; JOINED.
A230114; CAA13092.1; JOINED.
A230116; CAA13092.1; JOINED.
A230119; CAA13092.1; JOINED.
A230129; CAA13092.1; JOINED.
A230121; CAA13092.1; JOINED.
A230122; CAA13092.1; JOINED.
A230123; CAA13092.1; JOINED.
A230123; CAA13092.1; JOINED.
 PubMed-9854034;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MGD; MGI:106008; Anxa5.
InterPro: IPR001464; Annexin.
Pfam: PF00191; annexin; 4.
PRINTS; PF00195; ANNEXIN; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  35752 MW;
                                                                                                                                                                                                                                                                                                           EMBL; U29396; AAC52530.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             P48036; MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SMART; SM00335; ANX; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                82
154
238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22
94
178
253
319 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HSSP; P14668; 1A8B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SWISS-2DPAGE
                                                      retrovirus,'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       596;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Placenta.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                EMBL;
                                                                                                                                                                                                                                                                                                                                                                                         EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL;
                                                                                                                                                                                                                                                                                                                                       EMBL;
                                                                                                                                                                                                                                                                                                                                                   EMBL;
                                                                                                                                                                                                                                                                                                                                                                              EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                        EMBL;
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
```

```
312
                  SIPAYLAETLYYAMKGAGTDDHTLIRVWVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                                                                                                                                                     01-APR-1990 (Rel. 14, Created)
15-JUL-1998 (Rel. 36, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Annexin A5 (Annexin V) (Lipocortin V) (Endonexin II) (Calphobindin I)
(CBP-1) (Placental anticoagulant protein I) (PAP-I) (PP4)
(Thromboplastin inhibitor) (Vascular anticoagulant-alpha) (VAC-alpha)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Swairjo M.A., Concha N.O., Kaetzel M.A., Dedman J.R., Seaton B.A.; "Caf(2+)-bridging mechanism and phospholipid head group recognition in the membrane-binding protein annexin V."; Nat. Struct. Biol. 2:968-974(1995).
                                                                                                                                                                                                                                                                                                                                                                                    Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN-Wistar; TISSUE-Brain;
MEDLINE-56301899; PubMed-8667030;
Obsawa K., Imal Y., Ito D., Kobsaka S.;
"Molecular cloning and characterization of annexin V-binding proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           두
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Campos B., Mo Y.D., Wealy T.R., Li C.W., Swairjo M.A., Balch C., Head J.F., Retzinger G., Dedman J.R., Seaton B.A.; "Mutational and crystallographic analyses of interfacial residues annexin V suggest direct interactions with phospholipid membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       X-RAY CRYSTALLOGRAPHY (1.9 ANGSTROMS).
MEDLINE=9336987; PubMed=6362244;
CONCOLA N.O., Head J.F., Seaton B.A.;
CONCOLA N.O., Head J.F., Seaton B.A.;
"Rat annexin V crystal structure: Ca(2+)-induced conformational
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Imai Y., Kohsaka S.;
"Structure of rat annexin V gene and molecular diversity of 1ts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
MEDLINE=88273202; PubMed=2968983;
MEDLINE=88273202; PubMed=2968983;
Miller B.D., Tizard R., Mattaliano R.J., Sinclair L.K.,
Miller G.T., Browning J.L., Chow E.P., Burne C., Huang K.S.,
Pratt D., Wachter L., Hession C., Frey A.Z., Wallner B.P.;
Flive distinct calcium and phospholipid binding proteins share homology with lipocortin I.*,
J. Blol. Chem. 263:10799-10811(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 K-RAY CRYSTALLOGRAPHY (2.0 ANGSTROMS) OF 2-319.
                                                                                                                                                                                                       318 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     X-RAY CRYSTALLOGRAPHY (1.9 ANGSTROMS).
                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eur. J. Blochem. 232:327-334(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN-Wistar;
MEDLINE-96035863; PubMed-7556178;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE-96069783; PubMed-7583670;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-98272673; PubMed-9609693;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Blochemistry 37:8004-8010(1998).
                                                                                           1011111111 1111
304 GDYKKALLLCGGEDD 319
                                                                          327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Science 261:1321-1324(1993).
                                                                          GDYKKALLLL-SGEDD
                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INTERACTION WITH DNMT1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                  (Anchorin CII).
ANXA5 OR ANX5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE-Kidney;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             components."
                                                                        313 (
                                                                                                                                                                                                       ANX5_RAT
P14668:
253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   changes.
                                                                                                                                                                   RESULT 4
ANX5_RAT
                                                                                                                                                                                                                        a
                                                                        ð
```

```
(Anchorin CII)
ANXA5 OR ANX5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-AUG-1990
01-FEB-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ANX5_CHICK
                                                                                                                                                              HELIX
SEQUENCE
                                                                                                                                                                                                                                                                                  12
                                                                                                                                                                                                                                                                                                                                                   72
                                                                                                                                                                                                                                                                                                                                                                                     62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  302
                                                                                                                                                                                                                                                                                                                                                                                                                       132
                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P17153;
                                                                                                                          HELIX
HELIX
                                       HELIX
HELIX
HELIX
HELIX
HELIX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ANX5_CHICK
       ACCOCCOS OF THE SERVICE OF THE SERVI
                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R PRIMTS; PRO0196; ANNEXIN.
R PROMOM; PD000143; ANNEXIN.
R PROSTE; PS000233; ANNEXIN.
R PROSTE; PS000223; ANNEXIN.
R AnnexIn; Calcium/phospholipid-binding; Repeat; Blood coagulation;
W AnnexIn; Calcium/phospholipid-binding; Repeat; Blood coagulation;
W Placenta; Acetylation; 3D-structure.
INIT_MET 0 80 ANNEXIN 1.
T REPEAT 20 80 ANNEXIN 2.
T REPEAT 92 152 ANNEXIN 3.
T REPEAT 176 236 ANNEXIN 3.
T MOD_RES 1 1 ANNEXIN 4.
T MOD_RES 1 1 ACETYLATION.
with highly hydrophilic peptide structure.";
J. Neurochem. 67:89-97(1996).
--- FUNCTION: THIS PROTEIN IS AN ANTICOAGULANT PROTEIN THAT ACTS AS
AN INDIRECT INHIBITOR OF THE THROMBOPLASTIN'S-PECIFIC COMPLEX,
WHICH IS INVOLVED IN THE BLOOD COAGULATION CASCADE.
--- SUBUNIT: MONOMER. Binds ATRX and DNWT1.
--- DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.
                                                                                                                      calcium and phospholipid.
SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
SIMILARITY: Contains 4 annexin repeats.
                                                                                                                                                                                                                                                                                                                             , M21730; AAA41512.1; -, D42137; BAA07708.1; -, D42129; BAA07708.1; -, D42130; BAA07708.1; JOINED. BAA07708.1; JOINED. BAA07708.1; JOINED. BAA07708.1; JOINED. BAA07708.1; JOINED. BAA07708.1; JOINED. BAA07708.1; JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOINED.
JOINED.
JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR001464; Annexin.
Pfam; PF00191; annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                  BAA07708.1; J
BAA07708.1; J
BAA07708.1; J
BAA07708.1; J
BAA07708.1; J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PDB, 1A8B, 17-JUN-98.
PDB, 1BC0, 13-JAN-99.
PDB, 1BC1, 13-JAN-99.
PDB, 1BCW, 13-JAN-99.
PDB, 1BCW, 13-JAN-99.
PDB, 1BCW, 13-JAN-99.
PDB, 1BCY, 13-JAN-99.
PDB, 1AV1, 13-MAR-02.
PDB, 1M41, 04-FEB-03.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2RAN; 30-NOV-94.
1A8A; 17-JUN-98.
1A8B; 17-JUN-98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-FEB-03.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-FEB-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                       D42133; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; D42136;
PIR; C29250; L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          D42135;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PDB; 1N42; (PDB; 1N44; (
                                                                                                                                                                                                                                                                                                                                                                                   EMBL;
EMBL;
EMBL;
EMBL;
EMBL;
EMBL;
EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HELIX
HELIX
TURN
                                                                                                                                                                                                                                                                                                                                                   EMBL;
                                                                                                                                                                                                                                                                                                                                 EMBL;
                                                                                                                                                                                                                                                                                                                                                                     EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HELIX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PDB;
```

```
131
                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDT 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IKOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGE 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        192 IKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSI 251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-AUG-1990 (Rel. 15, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Annexin A5 (Annexin V) (Lipocortin V) (Endonexin II) (Calphobindin I)
(CBP-I) (Placental anticoagulant protein I) (PAP-I) (PP4)
(Thromboplastin inhibitor) (Vascular anticoagulant-alpha)
                                                                                                                                                                                                                                                                                                                                                                                                                    LLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
MEDILINE-88186917; PubMed-283522;
Fernandez N.P., Selmin O., Martin G.R., Yamada Y., Pfaeffle M.,
Deutzmann R., Mollenhauer J., von der Mark R.;
"The structure of anchorin CII, a collagen binding protein isolated
from chondrocyte membrane.";
J. Biol. Chem. 263:5921-5925(1988).
                                                                                                                                                                                                                                                                                           ä
                                                                                                                                                                                                                                                88.8%; Score 1455.5; DB 1; Length 318; 91.8%; Pred. No. 3.5e-87; ive 12; Mismatches 13; Indels 1;
                                                                                                                                                                                                         35613 MW; 1A755A7C11FA11CE CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Moss S.E., Crumpton M.J.; **Alternative splicing or cloning artefact?*; **Alternative splicing or cloning artefact?*; **Trends Biochem. Sci. 14:325-325(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        321 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUGGEST SEQUENCING ERROR,
MEDLINE-90020458; Pubmed-2552626;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SGDYKKALLLCGGEDD 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SGDYKKALLLL-SGEDD 327
                                                                                                                                                                                                                                                                                         Matches 291; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
  197
225
225
242
242
256
273
277
289
300
188
200
200
2218
224
263
274
278
293
303
318 AA;
                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=9031;
```

```
ANX5_CYNPY
P70075;
                                                                                                                                                                                                                                                                                                                    89
                                                                                                                                                                                                                                                                                                                                                        128
                                                                                                                                                                                                                                                                                                                                                                                                                                   248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       308
                                                                                                                                                                                                                       SEQUENCE
                                                HELIX
HELIX
HELIX
HELIX
HELIX
                                                                                                       HELIX
TURN
                                                                                                                                             HELIX
HELIX
HELIX
                                                                                                                          HELIX
                                                                                                                                                                         HELIX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ANX5_CYNPY
                                      rurn
                                                                                                                                                                                TURN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 6
  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                              RY FIRSTALLOGRAPHY (2.5 ANGSTROMS).

RX MEDLINE-93229489; PubMed-8471604;

RA BEALEY M.C., Boustead C.M., Walker C.M., Huber R.;

RELIGIONAL STATE OF CALIGNER BROWNIN AL 2.25-A resolution.";

R. Structure of Chicken annexin vat 2.25-A resolution.";

R. ELOCHEMISTY 32:3923-3929(1993).

C. I- FUNTION: COLLAGEN BINDING PROTEIN.

C. Calcium and phospholipid.

C. Calcium and phospholipid.

C. I- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.

C. I- SIMILARITY: Contains 4 annexin repeats.

C. This SWISS-PROT entry is copyright. It is produced through a collaboration of the European Bioinformatics institute. There are no restrictions on its content is statement is not removed. Usage by and for commercial entities and this statement is not removed. Usage by and for commercial contains an entit of license(180-180-180).

C. Modified and this statement is not removed. Usage by and for commercial contains an entit of license(180-180-180).
       MEDLINE-90243721; PubMed-2159478;
Fernandez M.P., Selmin O., Martin G.R., Yamada Y., Pfaeffle M.,
Deutzmann R., Mollenhauer J., von der Mark K.;
frhe structure of anchorin CII, a collagen binding protein isolated
from chondrocyte membrane.;
J. Biol. Chem. 265:8344-8344(1990).
                                                                                                                      SEQUENCE FROM N.A.
STRAIN-White leghorn; TISSUE-Liver;
MEDLINE-94215900; PubMed-9163186;
Fernandez M.P., Fernandez M.R., Morgan R.O.;
"Structure of the gene encoding anchorin CII (chick annexin V).";
Gene 141:179-186(1994).
                                                                         REVISIONS.
Pfacfile M., Ruggiero F., Hofmann H., Fernandez M.P., Selmin O.,
Yamada Y., Garrone R., von der Mark K.;
EMBO J. 9:1336-1336(1990).
                                                                                                                                                                                                TISSUE-Liver;
MEDLINE-93249384; PubMed-8484740;
Boustead C.M., Brown R., Walker J.H.;
"Isolation, characterization and localization of annexin V from chicken liver.";
Blochem. J. 291:601-608(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Repeat; 3D-structure,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
D -> E (IN REF. 1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Annexin; Calcium/phospholipid-binding; REPEAT 24 84 ANNEXIN 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                PRINTS; PR00196; ANNEXIN.
ProDom: PD0000143; ANNEXIN: 4.
SMART; SM00355; ANX: 4.
PROSITE: PS00223; ANNEXIN; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro; IPR001464; Annexin.
Pfam; PF00191; annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               156
240
315
168
14
28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PIR; A35381; LUCH5.
PDB; 1ALA; 31-OCT-93.
                                                                                                                                                                                         PARTIAL SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REPEAT
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REPEAT
REPEAT
```

```
ô
                                                                                                                                                                                                                                                                                                        187
                                                                                                                                                                                                                                                                                                                                                                                    247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 307
                                                                                                                                                                                                              67
                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                                                                                                                                                                                         188 QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                            8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                           Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cynops pyrrhogaster (Japanese common newt).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleogtomi;
Amphibia; Batrachia; Caudata; Salamandroidea; Salamandridae; Cynopa.
NCBI_Taxib-8330;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Yamamoto T., Hikono T., Abe S.I.;
"Differential expression of annexin V during spermatogenesis in the newt Cynops pyrrhogaster.";
Dev. Genes Evol. 206:64-71(1996).
                                                                                                                                                                         ö
                                                                                                                                     Length 321;
                                                                                                                                                                         Indela
                                                                                               36198 MW; 43E2983F86797025 CRC64;
                                                                                                                                     DB 1;
                                                                                                                                                     ; Pred. No. 8.6e-76; 38; Mismatches 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Innexin A5 (Annexin V).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              323 AA.
                                                                                                                                     78.0%; Score 1279;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SKDTSGDYRKALLLCGGDD 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
266
276
281
296
306
321 AA;
                                                                                                                                                     Best Local Similarity
Matches 250; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
TISSUE-Testis;
```

```
SEQUENCE
      between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@lsb-sib.ch).
                                                                                                                                          This SWISS-PROT entry is copyright. It is produced through a collaboration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEI 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 IASRTPEELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVE 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181 QDAQALFQAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNL 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EQLLLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MACGGGHMAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                MEMBRANE FUSION AND IS INVOLVED IN EXOCYTOSIS (BY SIMILARITY). DOMAIN: A pair of annexin repeats may form one binding site for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-A0C-1988 (Rel. 08, Created)
1-APR-1990 (Rel. 14, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Annexin A6 (Annexin VI) (Lipocattin VI) (P68) (P70) (Protein III)
(Chromobindin 20) (67 kDa calelectrin) (Calphobindin-II) (CPB-II)
FUNCTION: CALCIUM/PHOSPHOLIPID-BINDING PROTEIN WHICH PROMOTES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo saplens (Human).
Bukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBL_TaxID-9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.3e-63; DB 1; Length 323; 1.3e-63; hes 59; Indels 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26 86 ANNEXIN 1.
98 159 ANNEXIN 2.
182 242 ANNEXIN 3.
257 317 ANNEXIN 4.
323 AA; 35981 MW; 044B31AC28164CE2 CRC64;
                                                        calcium and phospholipid.
SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
SIMILARITY: Contains 4 annexin repeats.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Annexin; Calcium/phospholipid-binding; Repeat.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            672 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              66.5%; Score 1090.5;
66.7%; Pred. No. 1.3e
:ive 45; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301 TSLYSMIKGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                               Pfam, PF00191; annexin, 4.
PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                                                                              InterPro; IPR001464; Annexin.
                                                                                                                                                                                                                                                                                                      EMBL; D64134; BAA11012.1; -. HSSP; P08758; 1AVH.
                                                                                                                                                                                                                                                                                                                                                                                                                          SMART; SM00335; ANX; 4.
PROSITE; PS00223; ANNEXIN; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 Similarity
218; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ANXA6 OR ANX6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ANX6_HUMAN
P08133;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ANX6_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OC OC REED DATE OF THE OC
STTTTT NO DE NEW MENT OF STATE OF STATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
**XCHINE-2238257; PubMed=12477932;

X MEDLINE-22388257; PubMed=12477932;

X Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

A Altaschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

A Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Heng L.,

A Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Heng L.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Heng L.,

A Stapleton M., Soares M.B., Bonaldo M.F., Carsavant T.L., Scheetz T.E.,

RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RA Raha S.S., Worley R.C., Hale S., Garcia A.M., Gab L.J., Hulyk S.W.,

RA Richards S., Worley R.C., Male S., Garcia A.M., Gab L.J., Hulyk S.W.,

RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

R Villalon D.K., Muzny D.M., Schergren E.J., Lu X., Gibbs R.A.,

R Villalon D.K., Muzny D.M., Schergren E.J., Lu X., Gibbs R.A.,

R Nahiting M.M., Raden A., Youchman J.W., Green E.D., Dickson M.C.,

RA Blakesley R.W., Touchman J.W., Schmutz J., Myers R.M.,

R Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

R Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.,

R Generation and initial analysis of more than 15,000 full-length

R Thuman and mouse CDNA sequences.",

R Thum and mouse CDNA sequences.",
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Suedhof T.C., Slaughter C.A., Leznicki I., Barjon P., Reynolds G.A.; "Human 67-kDa calelectrin contains a duplication of four repeats
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               J. Mol. Biol. 260:638-643(1996).
-1- FUNCTION: MAY ASSOCIATE WITH CD21. MAY REGULATE THE RELEASE OF CA(2+) FROM INTRACELLULAR STORES.
-1- INDUCTION: BY EBV.
-1- DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -1- PTM: PHOSPHORYLATED IN RESPONSE TO GROWTH FACTOR STIMULATION.
-1- MISCELLANEOUS: SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY.
-1- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
-1- SIMILARITY: Contains 8 annexin repeats.
                                                                                                                                                                                                             "Primary structure of the human, membrane-associated Ca2+-binding protein p68 a novel member of a protein family."; EMBO J. 7:21-27(1988).
[1] SEQUENCE FROM N.A. MESQUENCE FROM N.A. MEDIJNE-88196081; PubMed-3258820; Crompton M.R., Owens R.J., Totty N.F., Moss S.E., Waterfield M.D. Crumpton M.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE-96326697; PubMed-8709144;
Benz J., Bergner A., Hofmann A., Demange P., Goettig P., Liemann
Huber R., Voges D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Yoshizaki H., Mizoguchi T., Arai K., Shiratsuchi M., Shidara Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
MEDIJINE-89380132; PubMed-2528541;
MEDIJINE-89380132; PubMed-2528541;
MEDIJINE-89380132; PubMed-2528541;
Saino Y., Shidara Y., Maki M.;
"Structure and expression of cDNA for calphobindin II, a human placental coagulation inhibitor.";
J. Blochem. 106:43-46(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Structure and properties of calphobindin II, an anticoagulant protein from human placenta."; J. Biochem. 107:43-50(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "The structure of recombinant human annexin VI in crystals and membrane-bound.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            found in 35-kDa lipocortins.";
Proc. Natl. Acad. Sci. U.S.A. 85:664-668(1988)
                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
MEDLINE-88124902; PubMed-2963335;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            X-RAY CRYSTALLOGRAPHY (3.2 ANGSTROMS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE-90236978; PubMed-2139657;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
```

```
INIT_MET
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SECUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REPEAT
REPEAT
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REPEAT
   PHENERAL MANAGEMENT AND DESCRIPTION OF THE PRESENCE OF THE PRE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              õ
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics in Stitute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modifiad and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RGTVTDFPGFDERADAETLRKAMKGLGTDEES1LTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10 RGSIHDFPGFDPNQDAEALYTAMKGFGSDKEAILDIITSRSNRQRQEVCQSYKSLYGKDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                 56.9%; Score 932; DB 1; Length 672; 58.1%; Pred. No. 5.2e-53; 1ve 52; Mismatches 80; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IE -> MK (IN REF. 2).
S -> T (IN REF. 2).
E -> D (IN REF. 1).
2829237029BDIDCB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  672 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                        ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
ANNEXIN 5.
ANNEXIN 6.
ANNEXIN 6.
ANNEXIN 7.
ACETYLATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                       EMBL; D00510; BAA00400.1; --
EMBL; 970097; CAA682465.1; --
EMBL; J03578; AAA35656.1; --
EMBL; BC017046; AAH17046.1; --
EMBL; BC017046; AAH17046.1; --
PDB; 1M012; 07-AUG-02.
Genew; HGNC:544; ANXA6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ANX6_MOUSE STANDARD; FP14824; Ol-APR-1990 (Rel. 14, Created)
                                                                                                                                                                                                                                                               MIM; 114070; ..
InterPro; IPR001464; Annexin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         75742 MW;
                                                                                                                                                                                                                                                                                                Pfam; PF00191; annexin; 8.
PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             310 GEYKKTLLKLSGGDD 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                313 GDYKKALLLISGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 58.1
Matches 183; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     225
554
618
672 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CONFLICT
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ដ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  73
                                                                                                                                                                                                                                                                                                                                                                                                                                                          REPEAT
REPEAT
REPEAT
REPEAT
REPEAT
REPEAT
MOD_RES
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ANX6_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT
 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                出る品
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        73 LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13 RGTVTDFPGFDERADAETLIRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10 RGSVHDFPEFDANQDAEALYTAMKGFGSDKESILELITSRSNKQRQEICQSYKSLYGKDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   133 KOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -i. DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.
-i. MISCELLANGOUS: SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY.
-i. SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
-i. SIMILARITY: Contains 8 annexin repeats.
                                                                                                                                                                                                                                                                                                                                  Moss S.E., Crompton M.R., Crumpton M.J.;
"Molecular cloning of murine p68, a Ca2+-binding protein of the
lipocortin family.";
Eur. J. Biochem. 177:21-27(1988).
--i- FUNCTION: MAY ASSOCIATE WITH CD21. MAY REGULATE THE RELEASE OF
CA(2+) FROM INTRACELLULAR STORES.
                                                                                                                            Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
01.APR-1990 (Rel. 14, Last sequence update)
15.SEP-2003 (Rel. 42, Last annotation update)
Annexin A6 (Annexin VI) (Lipocortin VI) (P68) (P70) (Protein III)
(Chromobindin 20) (67 kDa calelectrin) (Calphobindin-II) (CPB-II)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 672;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2D85C11DD235FC76 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          56.9%; Score 932; DB 1;
59.0%; Pred. No. 5.2e-53;
ive 49; Mismatches 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Repeat.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
ANNEXIN 5.
ANNEXIN 6.
ANNEXIN 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 8.
SMART; SM00335; ANX; 8.
PROSITE; PS00223; ANNEXIN; 8.
Annexin; Calcium/phospholipid-binding; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN-BALB/c;
MEDLINE-89030687; PubMed-2972541;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HSSP: P79134; 1AVC.
MGD; MGI:88255; Anxa6.
InterPro; IPR001464; Annexin.
Pfam; PF00191; annexin; 8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            75755 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; X13460; CAA31808.1; -. PIR; S01786; S01786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match
Best Local Similarity 59.09
Matches 186; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           443
532
607
672 AA;
                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                        NCBI_TaxID-10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28
100
184
259
371
                                                                                                      ANXA6 OR ANX6.
```

```
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RECORDENCE TOWN WITH TEACH WITH TEACH WITH TEACH WELL WITH TEACH WAS BY, WARS BY, WARS BY, WAS BY, 
190 KWGTDEAQFIYILGNRSKQHLRLVFDEYLKTTGKPIEASIRGELSGDFEKLMLAVVKCIR 249
                                                                                                                                                                                                                                                                                                                                           ANX4_HUMAN STANDARD; PRT; 318 AA.
P09535; Q9683; Q9BWK1;
01-WAR-1989 (Rel. 10, Created)
01-OGT-1996 (Rel. 34, Last sequence update)
15-SEP-2003 (Rel. 42, Last sequence update)
Annexin A4 (Annexin IV) (Lipocortin IV) (Endonexin I) (Chromobindin 4)
(Protein II) (P32.5) (Placental anticoagulant protein II) (PAP-II)
(P93.41).
                                                         SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                       Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE-8830902; PubMed-2970257; Grundmann U., Amann E., Abel K.-J., Kuepper H.A.; Grundmann U., Amann E., Abel K.-J., Kuepper H.A.; Isolation and expression of colon colon phospholipase A2 inhibitor family."; Behring Inst. Mitt. 82:59-67(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Characterization of human p33/41 (annexin IV), a Ca2+ dependent carbohydrate-binding protein with monoclonal anti-annexin IV antibodies, AS11 and AS17."; Biol. Pharm. Bull. 20:224-229(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Satoh A., Takayama E., Kojima K., Ogawa H., Katsura Y., Kina T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDINE-92155721; PubMed-1346776;
Tait J.F., Smith C., Frankenberry D.A., Miao C.H., Adler D.A.,
Disteche C.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Chromosomal mapping of the human annexin IV (ANX4) gene."; Genomics 12:313-318(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
MEDLINE=97239215; PubMed=9084877;
                                                                                                                                                                                                            |:|||||| | | ||
310 GEYKKALLKLCGGDD 324
                                                                                                                                                                           313 GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ANXA4 OR ANX4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matsumoto I.;
                                                                                                                                                                                                                                                                                                                      RESULT
                                                                                                                                                                                                                                                                                                                                                                                                          A COURT OF THE SET OF S
                                                         õ
                                                                                                                  g
                                                                                                                                                                     ò
                                                                                                                                                                                                                           8
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see http://www.isb-sib.ch/announce/or send an email to license@lsb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14 GTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                           "Sedimentation equilibrium analysis of five lipocortin-related phospholippes A2 inhibitors from human placenta. Evidence against a mechanistically relevant association between enzyme and inhibitor."; J. Biol. Chem. 263:18657-18663(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -:- MISCELLANEOUS: SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY.
-:- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
-:- SIMILARITY: Contains 4 annexin repeats.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        human placental annexin IV.";
J. Mol. Biol. 216:219-221(1990).
-!- FUNCTION: CALCIUM/PHOSPHOLIPID-BINDING PROTEIN WHICH PROMOTES.
MEMBRANE FUSION AND IS INVOLVED IN EXOCYTOSIS (BY SIMILARITY).
-!- DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.
                                                                                 MEDLINE-89066652; PubMed-2974032;
Ahn N.G., Teller D.C., Bienkowski M.J., McMullen B.A., Lipkin E.W.,
de Haen C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE-91073383; PubMed-2254922; Freemont P.S., Driessen H.P.C., Verbi W., Crumpton M.J.; "Crystallization and preliminary X-ray crystallographic studies of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                               "Placental anticogulant proteins: isolation and comparative characterization four members of the lipocortin family."; Biochemistry 27:6268-6276(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 923; DB 1; Length 318;
Pred. No. 8e-53;
                                                                                                                                                                                                                                                                                                                                                       Tait J.F., Sakata M., McMullen B.A., Miao C.H., Funakoshi
Hendrickson L.E., Fujikawa K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              78; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16B19E01500350F7 CRC64;
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE OF 1-14; 27-71; 99-143 AND 280-318.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL, M19383; AAC41689.1; ALT_INIT.
EMBL; M32809; AAA57740.1; -.
EMBL; M08152; BAA11227.1; ALT_INIT.
EMBL; BC000182; AAH0182.1; ALT_INIT.
EMBL; BC011659; AAH11659.1; ALT_INIT.
HSSP; P13214; IANN.
SWISS-2DPAGE; P09525; HUMAN.
PMNA-2DPAGE; P09525; -.
Genew; HGNC:542; ANXA4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium/phospholipid-binding;
                            [5]
SEQUENCE OF 26-55; 98-123 AND 279-307.
MEDITINE-89066652; PubMed-2974032;
                                                                                                                                                                                                                                                                                                                           MEDLINE-89118212; PubMed-2975506;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         95 R
35751 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 183; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SM00335; ANX; 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     X-RAY CRYSTALLOGRAPHY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                318 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INIT_MET
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ProDom;
SMART; S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REPEAT
```

ó

```
RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ANX6_RAT
DR KKW KKW CORRESPONDENT CORRE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           between the Swiss Institute of Bloinformatics and the EMBL outstation—
the European Bloinformatics Institute. There are no restrictions on its
use by non-profit institutions as long as its content is in no way
modified and this statement is not removed. Usage by and for commercial
entities requires a license agreement (See http://www.isb-sib.ch/announce/
or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through a collaboration
                                                                                                                      193
                                               313
                                                                                                                                                                                                                                                                                                                                                    WGTDEVKFLTVLCSRNRNHLLHVFDEYKRISQKDIEQSIKSETSGSFEDALLAIVKCMRN 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (Chromobindin 4)
I) (PAP-II)
                  DDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIK
                                                                                                                      OVYEERYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGELK
                                                                                                                                                                                                                       WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS
                                                                                                                                                                                                                                                                                                                        254 IPAYLAETLYYAMKGAGTDDHTLIRVWYSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Weber K., Johnsson N., Plessmann U., Van P.N., Soling H.-D., Ampe C., Vandekerckhove J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for protein kinase C; the domain structure Ca2+-modulated lipid binding proteins.";
EMBO J. 6:1599-1604(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -i- DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.
-i- MISCELLANGOUS: SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY.
-i- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
-i- SIMILARITY: Contains 4 annexin repeats.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE OF 1-126 FROM N.A.

TISSUE-Small intestine;

MINELINE-9627607; PubMed-8672129;

Winterce A.K., Fredholm M., Davies W.;

"Evaluation and characterization of a porcine small intestine cDNA library: analysis of 839 clones.";

Mamm. Genome 7:809-517(1996).

-!- FUNCTION: CALCIUM/PHOSPHOLIPID-BINDING PROTEIN WHICH PROMOTES MEMBRANE FUSION AND IS INVOLVED IN EXOCYTOSIS (BY SIMILARITY).

-:- SUBGNIT: Monomer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-Intestinal epithellum;
MEDLINE-87275850; PubMed-2956093;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; F14682; CAA23194.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ||:| ||:| ||
305 DYRKVLLVLCGGDD 318
                                                                                                                                                                                                                                                                                                                                                                                                                           DYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID-9823;
                                                                                                                                                                                                                                                                                                                                                                                                                           314
                  74
                                                                                                                134
                                                                                                                                                                  125
                                                                                                                                                                                                                       194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                       g
                  à
                                                                 셤
                                                                                                                ò
                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                           ð
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                74 DDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIK 133
                                                                                                                                                                                                                                                                                                                                                                                                                                  193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               304
                                                                                                                                                                                                                                                                                                                                                       73
                                                                                                                                                                                                                                                                                                                                                                                  64
                                                                                                                                                                                                                                                                                                                                                                       14 GTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             134 QVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGELK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       194 WGTDEEKFITTIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostom1;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                          Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eur. J. Biochem. 230:741-751(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN-Sprague-Dawley; TISSUE-Liver;
MEDLINE-55313131; PubMed=7607247;
Fan H., Josic D., Lim Y.P., Reutter W.;
Fan A. cloning and tissue-specific regulation of expression of rat
calcium-binding protein 65/67. Identification as a homologue of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Annexin A6 (Annexin VI) (Lipocortin VI) (P68) (P70) (Protein III)
(Chromobindin 20) (67 kDa calelectrin) (Calphobindin-II) (CPB-II)
                                                                                       SMART; SM00335; ANX; 4.
PROSTTE; PS00223; ANNEXIN; 4.
Annexin; Calcium/Phospholipid-binding; Repeat; Phosphorylation; Acetylation.
                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                          Length 318;
                                                                                                                                                                                                                                                                               56.2%; Score 921; DB 1; Length 5.58.6%; Pred. No. 1.1e-52; U.'.mmirches 79; Indels
                                                                                                                                                                                                                              ACETYLATION (PROBABLE).
PHOSPHORYLATION (BY PKC).
FA7D9CE2B7C631E8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   672 AA.
                                                                                                                                                                   ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (Calcium-binding protein CATA 65/67).
                                                                                                                                                                                                                                                            318 AA; 35697 MW;
                       InterPro; IPR001464; Annexin.
Pfam: PF00191; annexin; 4.
PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ||:| ||:| ||
305 DYRKVLLILCGGDD 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             314 DYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                       184; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                          Similarity
PIR; A27107; LUPG4
HSSP; P13214; 1ANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                22
94
178
253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ANXA6 OR ANX6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            annexin VI.
                                                                                                                                                                                                                              MOD_RES
MOD_RES
SEQUENCE
                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ANX6_RAT
P48037;
                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         125
                                                                                                                                                       INIT_MET
                                                                                                                                                                                  REPEAT
REPEAT
REPEAT
                                                                                                                                                                   REPEAT
```

```
134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                314
                                                                                                                                                                                                                                                                                                                                                          INIT_MET
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                             REPEAT
                                                                                                                                                                                                                                                                                                                                                                                      REPEAT
                                                                                                                                                                                                                                                                                                                                                                                              REPEAT
 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    οý
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       合
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                              This SWISS-PROT entry is copyright. It is produced through a collaboration between the SWISS institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       73 LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132.
                                                                                                                                                                                                                                                                                                                                                                                                                                     69
                                                                                                                                                                                                                                                                                                                                                                                               133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                                                                                                                                                                                                                                                                                                    13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                   Gaps
        DOWAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.
MISCELLAMEGUS: SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY. SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
SIMILARITY: Contains 8 annexin repeats.
                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                Length 672;
                                                                                                                                                                                                                                                                                                                                                                   82; Indels
                                                                                                                                                                                                                                                ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
ANNEXIN 6.
ANNEXIN 6.
ANNEXIN 6.
ANNEXIN 8.
ANNEXIN 8.
                                                                                                                                  EMBL; X86086; CAA60040.1; -.
PIR; S65683; S52844.
HSSP; P79134; 1AVC.
InterPro; IPR001464; Annexin.
Pfam; PF00191; annexin; 8.
ProDom; PR00196; ANNEXIN.
SMART; SM00335; ANX; 8.
PROSTTE; PS00223; ANNEXIN; 7.
Annexin; Calcium/Phospholipid-binding; Repeat.
INIT_MET
                                                                                                                                                                                                                                                                                                                                               56.2%; Score 921; DB 1;
58.7%; Pred. No. 2.7e-52;
ive 48; Mismatches 82,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (Rel. 35, Created)
(Rel. 35, Last sequence update)
(Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ę
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                             75622 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    313 GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |:|||||| | | || GEYKKALLKICGGDD 324
                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Annexin A4 (Annexin IV).
                                                                                                                                                                                                                                                  88
1160
244
3119
431
503
                                                                                                                                                                                                                                                                                                                             672 AA;
                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 12
ANX4_MOUSE
ID ANX4_MOUSE
AC P97429;
DT 01-NOV-1997 (1)
DT 38-FEB-2003 (1)
DE Annexin A4 (A)
                                                                                                                                                                                                                                                                                                                                                                Matches 185;
                                                                                                                                                                                                                                                                                                                                                                                                      10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      310
                                                                                                                                                                                                                                                                                                                    REPEAT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                   REPEAT
REPEAT
REPEAT
                                                                                                                                                                                                                                                          REPEAT
                                                                                                                                                                                                                                                                                                  REPEAT
                                                                                                                                                                                                                                                  REPEAT
음
                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see http://www.isb-sib.ch/announce.or send an email to licenseelisb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QVYEEEYGSSLEDDVVGDTSGYYQRMLVVLL\QANRDPDAGIDEAQVEQDAQALFQAGELK 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  254 IPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          74 DDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIK 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14 GTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                         Sable C.L., Shannon J., Riches D.W.H.;
Submitted (JAN-1997) to the EMBL/GenBank/DDBJ databases.

-!- FUNCTION: CALCIUM/PHOSHOLIPID-BINDING PROTEIN WHICH PROMOTES

-!- DOMAIN: A Pair of annexin repeats may form one binding site for calcium and phospholipid.

-!- DOMAIN: A SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY

-!- MISCELLANEOUS: SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY
                   Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 318;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              76; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         53FAC7AD8006BC0D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          55.9%; Score 916; DB 1; 57.3%; Pred. No. 2.3e-52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d-binding; Repeat.
BY SIMILARITY.
ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
                                                                                                                                                                                                                                                                                                                                                           (BY SIMILARITY).
-1- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
-1- SIMILARITY: Contains 4 annexin repeats.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              58; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ProDom; PD000143; Annexin; 4.
SMART; SM00335; ANX; ANX
PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium/phospholipid_binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ANNEXIN 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22 82 AN
94 154 AN
178 238 AN
253 313 AW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MGD; MGI 88030; Anxa4.
InterPro; IPR001464; Annexin.
Pfam; PF00191; annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; U72941; AAB40697.1; -. HSSP; P13214; 1ANN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 180; Conservative
musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                        SEQUENCE FROM N.A.
                                                                       NCBI_TaxID=10090;
                                                                                                                                                   STRAIN-C3H/HeJ;
```

```
INIT_MET
REPEAT
REPEAT
REPEAT
REPEAT
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   305
   Annexin;
                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                   HELIX
                                                                                                                                                                                                  HELIX
HELIX
HELIX
                                                                                                                                                                                                                                                   JELIX
TURN
                                                                                                                                                                                                                                                                                                 HELIX
HELIX
HELIX
                                                                                                                                                                                                                                                                                                                                                  HELIX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ANX4_CANFA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 14
  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OS DE DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see http://www.isb-sib.ch/announce/or send an email to license@isp-sib.ch).
                                  01-3AN-1990 (Rel. 13, Created)
01-3AN-1990 (Rel. 13, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Annexin A4 (Annexin IV) (Lipocortin IV) (Endonexin I) (Chromobindin 4)
(Protein II) (P32.5) (Placental anticoagulant protein II) (PAP-II)
(P94.X) (35-beta calcimedin) (Carbohydrate-binding protein P33/P41)
                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
MEDLINE-96205957; PubMed-8631806;
MCJima K., Yamamoto K., Irimura T., Osawa T., Ogawa H., Matsumoto I.;
"Characterization of carbohydrate-binding protein p33/41: relation
with annexin IV, molecular basis of the doublet forms (p33 and p41),
and modulation of the carbohydrate binding activity by
phospholipids.";
J. Biol. Chem. 271:7679-7685(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           **RAY CRYSTALLOGRAPHY (3 ANGSTROMS).
**REDLINE=98070213; PubMed=9405281;
**Zanottl G., Malpell G., Gliubich F., Folli C., Stoppini M., Olivi i.,
**Savola A., Berni R.;
**Structure of the trigonal crystal form of bovine annexin IV.";
**BIOCHEM. J. 329:101-106(1998).
**ISUBUNIT: Monomer.
**IDOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.
**INICATIY: BELONGS TO THE ANNEXIN FAMILY.
**INILARITY: CONTAINS 4 annexin repeats.
                                                                                                                                             Bos taurus (Bovine).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Bovidae; Bovinae; Bos.
                                                                                                                                                                                                                                            MEDIINE-89050088; PubMed-2847715; Hamman H.C., Gaffey L.C., Lynch K.R., Creutz C.E.; Coning and characterization of a cDNA encoding bovine endonexin
                                                                                                                                                                                                                                                                                   (chromobindin 4).";
Biochem. Blophys. Res. Commun. 156:660-667(1988).
                         318 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                               X-RAY CRYSTALLOGRAPHY (2.3 ANGSTROMS).
Sutton R.B., Sprang S.R.;
Submitted (SEP-1995) to the PDB data bank.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; M22248; AAA30507.1; EMBL; X13627; CAA31954.1; EMBL; D78178; BAA11243.1; PIR; A31578; LUBO4. PDB; LANN; 29-JAN-96. PDB; LAA, 25-ARP-01. Interpro; IPRO0191; annexin, Prodom; PP00191; annexin, Prodom; PP000143; Annexin, 4. SNART; SM00335; ANX; 4. PROSITE; PS00223; ANNEXIN, 4.
                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                    ANXA4 OR ANX4.
                                                                                                                                                                                                                                   TISSUE-Liver
                     ANX4_BOVIN
P13214;
RESULT 13
```

```
193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14 GTVIDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QVY EEEYGSSLEDDVVGDTSGY YORMLVV LLQANRDPDAGIDEAQVEQDAQALFQAGELK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       194 WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGPQIEETIDRETSGNLEQLLLAVVKSIRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          254 IPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           O; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-0CT-1996 (Rel. 34, Created)
01-0CT-1996 (Rel. 34, Last sequence update)
01-0CT-1996 (Rel. 34, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Annexin A4 (Annexin IV) (Lipocortin IV) (36 kDa zymogen granule
membrane associated protein) (2AP36).
ANXA4 OR ANX4
Canis familiaris (Dog).
Calcium/phospholipid-binding; Repeat; 3D-structure.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1; Length 318;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                35757 MW; 86BDBDF349D774FD CRC64;
                                                                                            25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 55.8%; Score 914; DB 1. Best Local Similarity 58.0%; Pred. No. 3e-52; Matches 182; Conservative 51; Mismatches (
                                                                                                         REF.
                                                                                            REF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          318 AA.
                              ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
L -> V (IN R
E -> K (IN R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DYRKVLLILCGGDD 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  304 : 318 AA;
                                                                                                                                                                      ANX4_CANFA
P50994;
```

ö

```
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sest Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REPEAT
REPEAT
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REPEAT
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REPEAT
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REPEAT
      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                  This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@ib-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                74 DDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIK 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     254 IPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14 GTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GIVKPASGFSATEDAQTLRKAMKGLGTDEDAIISVLAPRNTSQRQEIRTAYKSTIGRDLM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   134 QVYEERYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGELK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fukuoka S. -I.;
Submitted (SEP-1994) to the EMBL/GenBank/DDBJ databases.
-I- FUNCTION: CALCIUM/PHOSPHOLIPID-BINDING PROTEIN WHICH PROMOTES
MEMBRANE FUSION AND IS INVOLVED IN EXOCYTOSIS (BY SIMILARITY).
-I- DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.
-I- MISCELLANEOUS: SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY
Chordata; Craniata; Vertebrata; Euteleostomi;
Carnivora; Fissipedia; Canidae; Canis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 318;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           55.0%; Score 901; DB 1; Length 31 57.0%; Pred. No. 2.1e-51; 1.1e-51; 1.ve 54; Mismatches 81; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      42EF5B89179B4863 CRC64;
                                                                                                                                                                                                                                                                                          SIMILARITY: BELONGS TO THE ANNEXIN FAMILY. SIMILARITY: Contains 4 annexin repeats.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Annexin; Calcium/phospholipid-binding; Repeat.
INIT_MET 0 0 BY SIMILARITY.
REPEAT 22 82 ANNEXIN 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         671 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ANNEXIN 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ANNEXIN 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                        STRAIN-Mongrel; TISSUE-Pancreas;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        35681 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              InterPro: IPR001464; Annexin.
Pfam: PF00191; annexin; 4.
PRINTS; PR00196; ANNEXIN.
ProCom: PD000143; Annexin; 4.
SMART; SM00335; ANX; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; D38223; BAA07398.1; -. HSSP; P13214; 1ANN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE; PS00223; ANNEXIN; 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ||:| ||:| || || || DYRKVLLILCGGDD 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 179; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        178 2
253 3
318 AA;
  Eukaryota; Metazoa;
                   Mammalia; Eutheria;
                                                                                                                                                                                                                                                                      (BY SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ANX6_CHICK
ID ANX6_CHICK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match
                                                                                                                         Fukuoka
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
QC
SOUTH THE TENT OF 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEEL 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  66 KDLIADLKYELTGKFERLIVSLMRPPAYSDAKEIKDAIAGIGTDEKCLIEILASRTNQEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RAIKOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6 KVYRGSVKDFPGFNASQDADALCNAMKGFGSDKDAILDLITSRSNKQRLEICQAYKSQYG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               190 GELKWGIDEEKFITIFGIRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVK
                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauría; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                   SECUENCE FROM N.A.
MEDILID=9402130; PubMed-8267590;
MEDILID=9402130; PubMed-8267590;
MEDILID=9402130; PubMed-8267590;
"Characterization, cloning and expression of the 67-kDA annexin from chicken growth plate cartilage matrix vestcles.";
Blochem 197979: Res. Commun. 197.556-561(1993).
-1- FUNCTION: MAY ASSOCIATE WITH CD21. MAY REGULATE THE RELEASE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CA(2+) FROM INTRACELLUIAR STORES (BY SIMILARITY).
-!- DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.
01-OCT-1996 (Rel. 34, Created)
1-OCT-1996 (Rel. 34, Last sequence update)
15-SFP-2003 (Rel. 42, Last annotation update)
Annexin A6 (Annexin VI) (Lipocortin VI) (P68) (P70) (Protein III)
(Chromobindin 20) (67 kDa calelectrin) (Calphobindin-II) (CPB-II)
Gallus gallus (Chicken)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 671;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              D0E02F4311A93D98 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  83;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HSSP; P79134; LAVC.
InterPro: IRR001464; Annexin.
Pram: PF00191; annexin; 8.
PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 8.
SMART; SM00352; ANN; 8.
ANNEXIR: S800223; ANNEXIN; 5.
ANNEXIR: Calcium/phospholipid-binding; Repeat.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -:- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1e-50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     51; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               54.7%; Score 896.5;
57.7%; Pred. No. 1e-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
ANNEXIN 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ANNEXIN 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        75218 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; S67466; AAB29337.2; -. PIR; JC2029; JC2029.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 184; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           671 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                NCBI_TaxID-9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
```

ò q

δ

a

Search completed: August 22, 2003, 21:33:37 Job time : 10.6667 secs

```
GenCore version 5.1.6

Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on:
August 22, 2003, 21:29:22 ; Search time 31.6667 Seconds
(without alignments)
2664.733 Million cell updates/sec
1639-970-969-2
Sequence:
1 MACGGGHMAQVLRGTVTDFP......KGDTSGDYKKALLLLSGEDD 327
Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5
Searched:
830525 segs, 258052604 residues
Total number of hits satisfying chosen parameters:
830525
Minimum DB seq length: 0
```

1: sp_archea:*
2: sp_baccria:*
3: sp_fungi:*
4: sp_human:*
5: sp_nwan:*
6: sp_mammal:*
7: sp_nho:*
8: sp_paga:*
10: sp_plant:*
11: sp_rodent:*
12: sp_vini:*
13: sp_vini:*
14: sp_unclassified:*
15: sp_vini:*
17: sp_archeap:*
17: sp_archeap:*

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SPTREMBL_23:*

Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Q8vin2 rattus norv Q8bp75 mus musculu Q9n161 bombyx mori Q81gj8 drosophila Q91d0 mus musculu	G9n159 bombyx mori Q9n55 drosphila Q8wpg9 bombyx mori Q8wph0 bombyx mori	Q2/2-12 caenofrabda Q99ng6 bombyx mori Q90160 bombyx mori Q90633 drosophila O8ftby2 homo sanjen	O9Czi7 mus musculu Q9Sv57 artemia san Q991g3 mus musculu Q8mib5 oryctolagus Q9vxg3 drosophila	Q9vx94 drosophila Q98sh7 brachydanio Q88sh7 brachydanio Q8128 xenopus lae Q27864 caenorhabdi Q8cv9 mus musculu Q8bsl2 mus musculu Q27473 caenorhabdi Q9xy89 schistosoma
11 Q8VIN2 11 Q8BP75 5 Q9NL61 5 Q81GJ8 11 Q921D0	5 Q9NG55 Q9NG55 Q8WPG9	5 Q9GNG6 5 Q9GNG6 5 Q969D3 6 Q8mmay	1 095217 5 095857 11 099463 6 08MJB5 6 094463	5 Q9VXG4 13 Q98XH7 13 Q98XH7 13 Q92128 5 Q27864 11 Q8BXL2 5 Q27473
463 324 324 301	323 324 321 486	32337	333 315 317 357 511	3375 3375 3375 3375 3173 3173 55
47.0 45.9 45.9 45.9	4444	4 4 4 4 4 2 6 6 6 6 2 0 8 6 6	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
770 769 752 752 743.5	729 720 715 714	709 705 701 701	686.5 685 680 673 661	625 643 625.43 582 573.5 572 540
17 18 19 20 21	23 24 25 25 25	27 28 29 30	2 3 3 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	3 K 8 8 9 0 H 10 10 10 10 10 10 10 10 10 10 10 10 10

ALIGNMENTS

ô

q

~

ò ద ç g å 셤 ö 셤 ð a

```
312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12 LRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     72 LLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEITASRTPEELRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      63 LVNDMKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTDEKVLTEIIASRTPEELRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              132 IKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           113 IKQAYEEEYGSNLEDDVVGDTSGYYQRMLVVLLQANRDPDTAIDDAQVELDAQALFQAGE
                                     SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Cranlata; Vertebrata; Euteleostom1;
Mammalla; Eutheria; Rodentla; Sciurognath1; Muridae; Murinae; Rattus.
NCBI_TaxID-10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SMART; SM00335; ANX; 4.
PROSITE; PS00223; ANNEXIN; 3.
Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                         BINDING SITE
                                                                                                                                                                                                                                                                                                                                                                   Wen Y., Edelman J.L., Kang T., Sachs G.;
"Lipocortin V may function as a signaling protein for vascular endothelial growth factor receptor-2/Fik-1.".
Biochem. Biophys. Res. Commun. 258:713-721(1999).
-!- DOWAIN: A PAIR OF ANNEXIN REPEATS MAY FORM ONE BINDING SITE CALCIUM AND PHOSPHOLIPID (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
-!- SIMILARITY: CONTAINS 4 ANNEXIN REPEATS.
EMBL; AF051895; AAC06290.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 302;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             302 .
33965 MW; AB9FB40934A3D007 CRC64;
                                                                                                                                                                                                                       Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       le-89;
12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 11;
                                                                                                                                                                                 302 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No. 1e-8
12; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                84.8%; Score 1390;
92.0%; Pred. No. 1e-
                                                                                                                                                                                                            Created)
                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                       MEDLINE-99262163; PubMed-10329451;
                                                                                                        313 GDYKKALLLL-SGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    InterPro; IPR001464; Annexin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pfam; PF00191; annexin; 4.
PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                           07,
23,
                                                                                                                                                                                             070371;
01-AUG-1998 (TrEMBLrel. 07
01-AUG-1998 (TrEMBLrel. 07
01-MAR-2003 (TrEMBLrel. 23
Lipocortin V (Fragment).
Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           302 3
302 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
Matches 276; Conserv
                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                            TISSUE-Lund
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NON_TER
SEQUENCE
                                      253
                                                                                                                 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Repeat
                                                                                                                                                                                  070371
                                                                                                                                                         m
                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   음
                                                               g
                                                                                         à
                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         οχ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                   192
            127
                                                               187
                                                                                                                                                                    307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         63
         KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL
                                                                                                                188 QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                      VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVWVSRSEIDLFNIRKEFRKNFATSLYSMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SMART; SM00335; ANX; 4.
PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 11; Length 319;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  52E2C7CCEA386917 CRC64;
                                                                                                                                                                                                                                                                                                                                                     Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           90.0%; Score 1475.5; DB
1larity 93.4%; Pred. No. 1.1e-95;
Conservative 9; Mismatches 11
                                                                                                                                                                                                                                                                                                                  319
                                                                                                                                                                                                                                                                                                                                            Created)
                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                     KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  319 AA; 35738 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MGD; MGI:106008; Anxa5.
InterPro; IPR001464; Annexin.
Pfam; PF00191; annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Probom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                                                                         01-JUN-2001 (TrEMBLrel. 17, 01-JUN-2001 (TrEMBLrel. 17, 01-MAR-2003 (TrEMBLrel. 23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRINTS; PR00196; ANNEXIN
                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      295;
                                                                                                                                                                                                                                                                                                                                                                                 Annexin A5
                                                                                                                                                                                                                      308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         193
                                   19
                                                                                                                                                                   248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            64
          89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                                                              099LA1;
                                                                                                                                                                                                                                                                                                                0991.A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Repeat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loca
Matches
                                                                                                                                                                                                                                                                                      RESULT
099LA1
```

AN WEEK WAY OF THE PROPERTY OF

a

ò g ð

ð

q

ò

ö

ö

72 70

```
73 LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                 The FANTOM CONSOCTIUM.
The RIKEN Genome Exploration Research Group Phase I & II Team;
the RIKEN Genome Exploration Research Group Phase I & II Team;
Analysis of the mouse transcriptome based on functional annotation of
60,770 full length CDNAs."
Nature 420:563-573(2002).
EMBL; AR010342; BAC25291.].
SEQUENCE 476 AA, 53669 WW; 9390C5B5E6653D24 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                     Length 476;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
  23, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 81;
                                                                                                                                                                                                                                                                                                                                                                                                   56.9%; Score 932; DB 11; 59.0%; Pred. No. 2.7e-57;
                                                                                                                                                                                                                                                                                                                                                                                                                                               48; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                              STRAIN-C57BL/6J;
MEDLINE-22354683; PubMed-12466851;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HSSP; P79134; lAVC.
MGD; MGI:88255; Anxa6.
InterPro; IPR001464; Annexin.
Pfam; PF00191; annexin; 8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       311 GEYKKALLKLCGGDD 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17,
17,
23,
                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 186; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUN-2001 (TrEMBLrel.
01-JUN-2001 (TrEMBLrel.
01-MAR-2003 (TrEMBLrel.
01-MAR-2003 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similar to annexin A6
                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus (Mouse)
                                              Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=10090;
                                                                                                           NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             313
                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  099JX6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9XL660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ANXA6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT
  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                73 LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        64 INDLKSELGGKFETLIVALMTPPTAYDVVSLRNAIKGAGTDEKVLVETLASRTPQQVKDI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.

MEDLINE-99025617: PubMed-9809745;
Osterloh D., Mittbrodt J., Gerke V.;
Characterization and developmentally regulated expression of four annexins in the Xillifish medaka.";
DNA Call Biol. 17:885-847(1998).
-I- DOMAIN: A PAIR OF ANNEXIN REPEATS MAY FORM ONE BINDING SITE FOR CALCIDM AND PHOSPHOLIPID (BY SIMILARITY).
-I- SIMILARITY: BELONGS TO THE ANNEXIN REPEATS.
-I- SIMILARITY: CONTAINS 4 ANNEXIN REPEATS.
                                                                                                                                                                                          Oryzias latipes (Medaka fish) (Japanese ricefish).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha;
Beloniformes; Adrianichthyidae; Oryziinae; Oryzias.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SMART; SM00335; ANX; 4.
PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              62; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      317 AA; 34765 MW; AFD618681BAFF0FE CRC64;
                                                       093445 PRELIMINARY, PRT, 317 AA.
01-NOV-1998 (TYEMBLEAL 08, Created)
01-NOV-1998 (TYEMBLEAL 08, Last sequence update)
01-NOV-1998 (TYEMBLEAL 23, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OBCEXO PRELIMINARY; PRT; 4/6 AA. QBCEXO; 01-MAR-2003 (TrEMBLrel. 23, Created) 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63.6%; Score 1042; DB 13
64.4%; Pred. No. 2.9e-65;
1ve 48; Mismatches 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pfam; PF00191; annexin; 4.
PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         InterPro; IPR001464; Annexin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |||:|||||| || || CDYRKALLLCGGDD 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; Y11253; CAA72123.1; -- HSSP; P17153; 1ALA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 04.40
Matches 203; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                          Annexin max2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OSCEXO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2555
                                                                                   SOW WENT TO THE PROPERTY OF TH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
```

ç

ò

ç

ç

252

130

310

```
133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDFDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                      SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KQVYEEERGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                     KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                  13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     73 LODLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SITE FOR
                                                                                                                                                                                                                                                                                                                                                Neoteleostel;
                                                                                                                                                                                                                                                                                                         Annexin maxi.

Oryzias latipes (Medaka fish) (Japanese ricefish).

Bukaryota: Metazota: Chordata: Craniata; Vertebrata: Buteleostomi;

Actinopterygii; Meopterygii; Teleostei; Buteleostei; Neoteleostei

Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha;

Beloniformes; Adrianichthyidae; Oryziinae; Oryzias.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       pfam; PF00191; annexin; 4.
PRINTS; PR00196; ANNEXIN,
ProDom, PD000143; Annexin; 4.
SMART; SM00335; ANX; ANX;
PROSITE; PS00222; ANX; ANNEXIN; 4.
ANNEXIN; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                83; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              D2EED32C8676777D CRC64;
                                                                                                                                                                                                                                                                    (TrEMBLrel. 08, Created)
(TrEMBLrel. 08, Last sequence update)
(TrEMBLrel. 23, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Score 866; DB 13;
; Pred. No. 6.5e-53;
59; Mismatches 83;
                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              320 AA; 35424 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR001464; Annexin.
                                                                                                                                                         GDYKKALLLLSGEDD 327
                                                                                                                                                                                GEYKKALLKLCGGDD 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       52.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 54.59
"a+rhes 170; Conservative
                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=8090;
                                                                                                                                                                                                                                                                       01-NOV-1998
                                                     193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                       253
                                                                                                                              251
                                                                                                                                                         313
                                                                                                                                                                                311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  187
                                                                                                                                                                                                                                              093444
                                                                                                                                                                                                                     RESULT
093444
                                                    ò
                                                                             d
                                                                                                      ò
                                                                                                                              셤
                                                                                                                                                       ò
                                                                                                                                                                               셤
                                                                                                                                                                                                                                                           ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                              ö
                                                                                                                                                                                                      LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                    192
                                                                                                                                                                                                                                                                     252
                                                                                                                                                                                                                                                                                                                                                            312
                                                                                                                                                                                                                                                                                                                                                                        ::||| ||||||||:||| ||:| || ||:| ||:|||| ||:|||| ||::|
IEDLAYELTGREFERLIVNLARPLAYCDAKEIKDAISGVGTDEKCLIEILASRTNEQMHQL 130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                               20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ō
                                                                                                                                                                   RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                        KOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL
                                                                                                                                                                                                                                                                                                          KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGF01EETIDRETSGNLEOLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                         SIPAYLAETLYYAMKGAGTODHTLIRVWYSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN-C57BL/6J; TISSUE-Body;
MEDLINE-22354683; PubMed-12466851;
The FANTOM Consortium the REANTOM Consortium Exploration Research Group Phase I & II Team;
The RIKEN Genome Exploration Research Group Phase I & II Team;
"Analysis of the mouse transcriptome based on functional annotation Nature 420:563-673(2002).";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. NCBI_TaxID-10090;
                       SMART; SM00335; ANX; 8.
PROSITE; PS00223; ANNEXIN; 8.
Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 673;
                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81; Indels
                                                                                                      Length
                                                                           667 AA; 75260 MW; 363088A2A55CFF34 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; AK030728; BAC27101.1; -.
SEQUENCE 673 AA; 75885 MW; DCC5FC56CBD88809 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (TrEMBLrel. 23, Created)
(TrEMBLrel. 23, Last sequence update)
(TrEMBLrel. 23, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       56.7%; Score 930; DB 11;
59.0%; Pred. No. 6.1e-57;
1ve 48; Mismatches 81;
                                                                                                   Score 932; DB 11;
Pred. No. 4.4e-57;
                                                                                                                             49; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
PR00196; ANNEXIN, PD000143; Annexin; 8.
                                                                                                    56.9%;
                                                                                                                                                                                                                                                                                                                                                                                                           GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                         |:|||||| | | ||
311 GEYKKALLKLCGGDD 325
                                                                                                                              186; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity ... Matches 186; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus (Mouse).
                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAR-2003 (
01-MAR-2003 (
01-MAR-2003 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Annexin A6.
                                                                           SEQUENCE
                                                                                                                                                                            11
                                                                                                                                                                                                                                                       133
                                                                                                                                                                                                                                                                                                                                  191
                                                                                                                                                                                                     73
                                                                                                                                                                                                                                                                                                         193
                                                                                                                                                                                                                                                                                                                                                        253
                                                                                                                                                                                                                                                                                                                                                                                                           313
                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                 251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           73
 PRINTS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                   Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08BSS4;
                                                                 Repeat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QBBSS4
 SYKERORR
                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                  윱
                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

ö

72 99 132

S

셤 ð g

```
313 GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                      Annexin 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Repeat.
                                                                                                                                                                                                     090X16
                                                                                                                                                                                                                                       090X16
                                                                                                                                          RESULT 10
Q90X16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0921F1
                                                                                                                                                                                                        DDT TO DDT TO DD T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
   ò
                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ζ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KWGIDEEKFITIFGIRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE—99025617: PubMed=9809745;
Osterloh D., Wittbrodt J., Gerke V.;
Characterization and developmentally regulated expression of four annexins in the killifish medaka.";
DNA Cell Biol. 17:835-847(1998).
-!- DOMAIN: A PAIR OF ANNEXIN REPEATS MAY FORM ONE BINDING SITE FOR CALCIUM AND PHOSPHOLIPID (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
-!- SIMILARITY: CONTAINS 4 ANNEXIN REPEATS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oryzias latipes (Medaka fish) (Japanese ricefish).
Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha;
Beloniformes; Adrianichthyidae; Oryziinae; Oryzias.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ProDom; PD000143; Annexin; 4. '
SMART; SM00335; ANX; 4. 
PROSITE; PS00223; ANNEXIN; 4. 
Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match 52.2%; Score 856; DB 13; Length 508; Best Local Similarity 55.2%; Pred. No. 6.4e-52; Matches 174; Conservative 51; Mismatches 90; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             508 AA; 53051 MW; 3C6728D475CAE430 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                      Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                 Created)
                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro; IPR001464; Annexin.
InterPro; IPR006031; XYPPX.
Pfam; PF00191; annexin; 4.
Pfam; PF02162; XYPPX; 15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                       01-NOV-1998 (TrEMBLrel. 08, 01-NOV-1998 (TrEMBLrel. 08, 01-MAR-2003 (TrEMBLrel. 23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; Y11255; CAA72125.1; -. HSSP; P79134; IAVC.
                                                                                                                                                                         307 GDYRKILLELCG 318
                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                       GDYKKALLLLSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID-8090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Annexin max4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          193
                        253
                                                                                                                                                                                                                                                                                                                                                093447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Repeat
                                                                                                                                                                                                                                                                                           Φ
```

SO ORRESPONDE SERVICE SERVICE

g

å

g ð

g

å

윱

å

a

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    73 LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99
                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.

A Seville R.A., wijjar S., Barnett M.W., Jones E.A.;

Tubules in Xenopus laevis.";

I submitted (Jun'2001) to the EMBL/GenBank/DDBJ databases.

C -1- DOMAIN: A PAIR OF ANNEXIN REPEATS MAY FORM ONE BINDING SITE FOR CALCIUM AND PHOSPHOLIPID (BY SIMILARITY).

C -1- SIMILARITY: BELONGS TO THE ANNEXIN REPEATS.

C -1- SIMILARITY: CONTAINS 4 ANNEXIN REPEATS.

R EMBL, AY039235; AAK83461.1;

R InterPro: IPRO01464; Annexin.

R Pfam: PF00191; annexin.

R PRINTS; PR00195; ANNEXIN.

R PRINTS; PR00195; ANNEXIN.

R PRIODOM: ANNEXIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     193 KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
Xenopodinae; Xenopus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    `.
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SMART; SM00335; ANX; 4.
PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 13; Length 321;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   51.8%; Score 849; DB 13; Length 3 54.0%; Pred. No. 1e-51; ive 55; Mismatches 90; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5C28CAFAC17687D CRC64;
                                                                                                                                                                                               Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Æ.
                                                                                                                         321 AA
                                                                                                                                                                                                                                                                       Xenopus laevis (African clawed frog).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q921F1 PRELIMINARY; PRT; Q921F1; 01-DEC-2001 (TrEMBLrel. 19, Created)
                                                                                                                                                                       Created)
                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       321 AA; 35801 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          307 GDYRKVLLKLCGGED 321
                                                                                                                                                                     01-DEC-2001 (TrEMBLrel. 19, 01-DEC-2001 (TrEMBLrel. 19, 01-MAR-2003 (TrEMBLrel. 23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             313 GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 54.0
Matches 170; Conservative
494 GDYKNLLLKLCGSSD
                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=8355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 X E
```

ဖ

```
Ouery Match
Best Local Similarity
Matches 177; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             327 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID-9913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Annexin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          095L54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          095L54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 13
095L54
           SEE SHEEL STORY OF STREET STRE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KOVYEEEYGSSLEDDVVGDTSGYYORMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              193 KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         253 SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                            Eukaryota; Merazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBL_TaxID=10090;
                                                                                            Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 503;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         87; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              503 AA; 54079 MW; 33F3471EE21A0D32 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Created)
Last sequence update)
Last annotation update)
  Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  51.7%; Score 847; DB 11;
53.7%; Pred. No. 2.7e-51;
tive 59; Mismatches 87;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      327 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
SMART; SM00335; ANX; 4.
19,
23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |||:| || : | :|
GDYRKILLKICGGND 503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       313 GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         169; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
01-DEC-2001 (TrEMBLrel.
                               (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (TrEMBLrel.
                                                         Similar to annexin All.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-OCT-2002 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (Tremblrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similar to annexin AB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. Strausberg R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-OCT-2002
01-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Repeat.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08K2N9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q8K2N9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ANXAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 12
Q8K2N9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ID DATE OF THE REPORT OF THE T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                õ
```

```
200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     260
                                                                                                                                                                                                                                                                                                                                                                                                                                            142 SSLEDDVVGDTSGYYQRMLVVLLQANRDPDAG-IDEAQVEQDAQALFQAGELKWGTDEEK 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82 GKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIKQVYEEEYG 141
                                                                                                                                                                                                                                                                                        91
                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                              201 FITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRSIPAYLAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 261 TLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSGDYKKALL
                                                                                                                                                                                                                                                                                        22 FDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLLDDLKSELT
                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Annexin VIII.
Bos taurus (Bovine).
Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Euthazoa; Chordata; Cetartiodactyla; Ruminantia; Pecora; Bovoldea; Bovinae; Bovinae; Box
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                    ..
                                                                                                                                                                                                                 DB 11; Length 327;
                                                                                                                                                                                                                                                    Indels
   EMBL/GenBank/DDBJ databases
                                                                                                                                                                           36724 MW; 56DB9CFAFA8C2B21 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                36787 MW; 2EB178E13738CF22 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 6;
                                                                                                                                                                                                             51.3%; Score 840.5; DB 11;
57.8%; Pred. No. 4.2e-51;
11ve 49; Mismatches 79;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            327 A.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 836.5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pfam; PF00191; annexin; 4.
PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                       InterPro; IPR001464; Annexin.
Pfam; PF00191; annexin; 4.
                                                                                             PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
Submitted (MAY-2002) to the EMBL; BC030407; AAH30407.1; MGD; MGI:1201374; Anxa8.
                                                                                                                                                     PROSITE; PS00223; ANNEXIN; 4
SEQUENCE 327 AA; 36724 MW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROSITE; PS00223; ANNEXIN; 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      51.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-DEC-2001 (TrEMBLrel. 19, 01-DEC-2001 (TrEMBLrel. 19, 01-MAR-2003 (TrEMBLrel. 23,
                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                     SMART; SM00335; ANX; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SMART; SM00335; ANX;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         321 LLSGED 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             321 NLVGTD 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
```

```
ö
                                                                                                                                                           313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               312
                                                                                                                                                                        193
                                                                                253
                                                                                                                                    253
                                  DLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIKQ 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  68
 14 TVKGSPHFNPVPDAETLYKAMKGIGTNEQAIIDVLTRRSSAQRQQIAKSFKAQFGSDLTE 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                The FANTOM Consortium,
the RIKEN Genome Exploration Research Group Phase I & II Team;
the RIKEN Genome Exploration Research Group Phase I & II Team;
Analysis of the mouse transcriptome based on functional annotation of
60,770 full-length cons.";
Nature 420:563-573(2002).
EMBL; AK090055; BAC41070.1;
SEQUENCE 323 AA; 36356 MW; 9F69F57BCFAC6A85 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               135 VYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAG-IDEAQVEQDAQALFQAGELK
                                                                                                               WGTDBEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS
                                                                                                                            254 IPAYLAETLYYAMKGAGTDDHTLIRVWVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               253 SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          73 LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      133 KQVYEBEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            48.7%; Score 799; DB 11; Length 323; 49.2%; Pred. No. 3.3e-48; tive 63; Mismatches 97; Indels (
                                                                                                                                                                                                                                                                                                            01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
                                                                                                                                                                                                                                                                                        323 AA.
                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE-Kidney;
MEDLINE-22354683; PubMed-12466851;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             313 GDYKKALLLLSGEDD 327
                                                                                                                                                                                                         DYKKALLLLSGED 326
                                                                                                                                                                                                                       III III I I I I DYKNALLSLVGSD 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity 49.2%
Matches 155; Conservative
                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                             Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                  Annexin A3.
                                                                                                                194
                       75
                                                                                                                                      194
                                                                                                                                                                                  254
                                                                                                                                                                                                         314
                                                                                                                                                                                                                              314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                        08C1X9
                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                       οy
                                            g
                                                                   οy
                                                                                       q
                                                                                                                ò
                                                                                                                                    셤
                                                                                                                                                           ð
                                                                                                                                                                                Ω
                                                                                                                                                                                                         à
                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ij
                                                                                                                                       254 IHGIPPARKGAGTLDGTLIRNIVSRSEIDLNLIRNQFKKMYGKTLSSMIMEDTSG 313
                                                                            75 DLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIKQ 134
                                                                                                                           VY EEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAG-IDEAQVEQDAQALFQAGELK 193
                                             15 TVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLLD 74
                                                                                         TVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLLD
                                                                                                                                                                     WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS
                                                                                                                                                                                                                  IPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                             Oryctolagus cuniculus (Rabbit).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Lagomorpha, Leporidae, Oryctolagus.
             ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 327;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               50.2%; Score 822.5; DB 6; Length 55.9%; Pred. No. 7,6e-50; ive 48; Mismatches 89; Indels
 Pred. No. 7.9e-51; . 53; Mismatches 84; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1815B77B6BE50AB7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                   Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                 ż
                                                                                                                                                                                                                                                                                                                                                327
                                                                                                                                                                                                                                                                                                                                                                                                       Annexin A8 (Annexin 8) (Annexin VIII)
ANXA8 OR ANX8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ANNEXIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ANNEXIN
                                                                                                                                                                                                                                                                                                                                                                   01-WAY-1999 (TrEMBLrel. 10, Created)
01-WAY-1999 (TrEMBLrel. 10, Last seq
01-WAR-2002 (TrEMBLrel. 20, Last anno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ANNEXIN
                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         36680 MW;
 55.9%;
                                                                                                                                                                                                                                                                DYKKALLLLSGED 326
                                                                                                                                                                                                                                                                             Best Local Similarity 55.9
Matches 175; Conservative
Best Local Similarity 55.9
Matches 175, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       327 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=9986;
                                 15
                                                                                                                                                                      194
                                                                                                                                                                                                                 254
                                                                                                                                                                                                                                                                314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                            097529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REPEAT
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RPEAT
                                                                                                                                                                                                                                                                                                                         RESULT 14
                                                                                                                                                                                                                                                                                                                                   097529
                                                                                                                                                                                                                                                                                                                                                윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                     셤
                                                                            ö
                                                                                                   셤
                                                                                                                          ð
                                                                                                                                            8
                                                                                                                                                                     ò
                                                                                                                                                                                          g
                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                õ
                                                                                                                                                                                                                                                                                     g
```

Search completed: August 22, 2003, 21:35:24 Job time : 37.6667 secs

Fri

```
BX396791 BX398791
BX396240 BX396240
BX379218 BX379218
AL542496 AL542496
BX338605 BX358605
BX402751 BX402751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BX377166 BX377166
BM016480 603641294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 1602)
Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Direct Submission
Submitted (06-JON-2002) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NIH-MGC Project URL: http://mgc.ncl.ulh.gov
Contact: MGC help desk
Emall: cgapbs-rémail.nlh.gov
Issue Procurement: ATCC/DCTD/DTP
CDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Baylor College of Medicine Human Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1602 bp mRNA
Homo sapiens, clone IMAGE:3924873, mRNA.
BC032093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ALIGNMENTS
                                                                                                                                                                                          AL514020
BX400530
BX400530
BX464033
BX464033
BX11033
BX20741
BX117039
BX117629
BX3399098
                                                                                                                                                                                                                                                                                                                                             ALS41300
BX440213
BX440213
BX42940
BX399821
AL557256
AL55723
BX449042
BX449042
BX461471
BQ167512
BG3922737
                                                                 BX358605
BX402751
AL547761
AL517516
AL517516
AL583578
BU168479
BX365074
BQ229583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BG767111
BX397346
AU117640
BX377166
BM016480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BC032093.1 GI:21327830
                                                                                                                                                                 13
                                                                                                                                                                                                           13
                                                                                                                                                                                                                                                                                         13
13
13
                                                                                                                                                                                                                                                                                                                                                              13
                                                                                                                                                                                                                                                                                                                                                                                      13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
1201
996
11062
11201
11201
11201
11201
11201
11201
11201
11201
11201
11004
                                                                                                                                                                                                                                                886
848
1201
987
985
798
1085
1201
994
                                                                                                                                                                                                                                                                                                                                                                                     1137
1201
1201
1201
1201
909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
USA
855.2
881.6
883.0
838.6
838.4
832.2
831.6
828.6
                                                                                                                                     8820.4
8806.8
8806.8
1789.6
1789.2
1788.2
1782.4
1782.4
1777.2
1777.2
1777.2
1777.2
1779.8
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
1771.4
17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EC032093
LOCUS
DEFINITION
ACCESSION
VERSION
VERSION
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REMARK
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1
 August 28, 2003, 15:48:20 ; Search time 1675.67 Seconds (without allgaments) 14228.779 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                             1 atggcaggtggctgtggcca......tgctctccggagaagatgac 981
                                                                                                                                                                                                                                                                           45562784
          GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                              22781392 segs, 12152238056 residues
                                                                                                                                                                                                                                                                        hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                        summarles
                                                                nucleic search, using sw model
                                                                                                                                                                                                      IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 su
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  em_gss_pro:*
em_gss_rod:*
em_gss_phg:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          em_gss_vri:*
gb_gssl:*
gb_gss2:*
                                                                                                                                                                                                                                                                                                     length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gb_est4:*
gb_est5:*
em_estfun:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  em_gss_inv:*
em_gss_pln:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       em_gss_hum:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               em_gss_vrt:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            em_gss_fun:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         em_gss_mam:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     em_gss_mus:*
                                                                                                                                                US-09-970-969-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        em_estom:*
                                                                                                                                                                                                                                                                                                                                                                                                                              em_esthum:*
                                                                                                                                                                                                                                                                                                                                                                                                                                        em_estin: *
em_estmu: *
em_estov: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cm_estpl:*
em_estro:*
em_htc:*
gb_estl:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gb_est2:*
gb_htc:*
                                                                                                                                                                                                                                                                                                                                                                                                               em_estba:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gb_est3:*
```

EST:

Database

rotal number of

Searched:

Perfect score:

Sequence:

٠

OM nucleic

ä

Run

Scoring table:

seg

88

Minimum | Maximum |

HTC 06-JUN-2002

Sequencing Center Center code: BCM-HGSC

BC032093 Homo sapi BM464122 AGENCOURT BX441583 BX441583 BX379189 BX379189

BC032093 BM464122 BX441583 BX379189

13 13 13

1602 1076 1071 1201

97.7 89.1 88.5 87.5

Description

ü

8

Length

Query Match

Score 928 874.4 868.4 858.4

Ņ. Result

N

```
contact: Robert Strausberg, Ph.D.
Email: cgapbs remail.nlh.gov
Tissue Procurement: ATCC/DCTP/DTP
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
plate: LLAM12235 row: n column: 14
High quality sequence stop: 708.
Location/Qualifiers
1.1076
/organism="Homo sepiens"
//lab_host="Homo sepiens"
//lab_host="HARGE:5540173"
//Lissue_type="mark"
//lab_host="BH10B (phage-resistant)"
//clone="library constructed by Life
Tachnologies"
//ab_host="Gran: skb: Library constructed by Life
Tachnologies"
                                                                                                                                                                                                                                                                                                                                                                DM404142
AGENCOURT_6445585 NIH_MGC_72 Homo saplens cDNA clone IMAGE:5540173
5', mRNA sequence.
                                                                                                                                                                     886
                                                                                                                                                   915
                                                         928
                                                                                       855
                                                                                                                                                                                                             916 ATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAA 975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTGATGAGCGGGCTGAT 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 1076)

NIH-MGC http://mgc.ncl.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                       809 TTTCAAATTGAGGAAACCATTGACGGGGGACTTCTGGCAATTTAGAGCAACTACTCCTT
                            ATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAG
                                                                                                                                                   ATTGATCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1076;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      89.1%; Score 874.4; DB 12; 96.9%; Pred. No. 1.5e-223; Natematches 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     274 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2.73 9
                                                                                                                                                                                                                                                                                                                                                                                                                                             BM464122.1 GI:18513164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Technologies.
229 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                             EST.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches 932; Conservative
                                                                                                                                                                                                                                                                                                    GATGAC 1114
                                                                                                                                                                                                                                                                         976 GATGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                           BM464122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      296
                                                                                                                                                                                                                                                                                                       1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          105
                                                                                                                                                     856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
JOURNAL ·
                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                  RESULT 2
BM464122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                              ŏ
                                                          8
                                                                                                                  d
                                                                                                                                                   ò
                                                                                                                                                                                  8
                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                          ö
                                                                                          be found
                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITCAAAITGAGGAAACCAITGACGGGGAGACITCTGGCAAITTAGAGCAACTACTCT 735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGACTCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAG 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAA 435
                              X., Hulyk, S.W., Hale, S.M., S., Martin, R.G., Muzny, D.M.,
                                                                                       Clone distribution: MGC clone distribution information can be for through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 26 Row: f Column: 11
This clone has the following problem: no 5' EST match.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTGATGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 509 CCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                GATGACGTGGTGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTAACAGAGCCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCT
                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                  Length 1602;
                                                                                                                                                                1. 1602
/organism="Homo sapiens"
/mol_type="manna"
/db_xref="taxon:9606"
/clone="IMAGE:3924873"
/tlsue_type="Skin, melanotic melanoma."
/lone_lib="NIH_MGC_72"
                                                                                                                                                                                                                                                                                                                                                                                Indels
Web site: http://www.hgsc.bcm.tmc.edu/cdna/
Contact: amg@bcm.tmc.edu
                                                                                                                                                                                                                                                                                                                                               ch 11; Similarity 99.5%; Pred. No. 6.5e-246; 961; Conservative 0; Mismatches 5;
                                                                                                                                                                                                                                                                                      : pCMV-SPORT6"
364 g 452 t
                            Gunaratne, P.H., Garcia, A.M., Lu,
Yoon, V.S., Kowis, C.R., Lawrence,
Richards, S., Gibbs, R.A.
                                                                                                                                                                                                                                                                                         /note="Vector:
                                                                                                                                                                                                                                                                                                      337 c
                                                                                                                                                                                                                                                                                                       449
                                                                                                                                                                                                                                                                                                                                                                                                                16
                                                                                                                                                                                                                                                                                                                                                                                                                                             149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9/9
                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                    Best Local
                                                                                                                                                                                                                                                                                                      BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                     FEATURES
```

셤 ð 음

ô

g

à

g õ g ö g ò g

ô

q

à 셤 ò

ò

음

ò

Homo sapiens (human) Homo sapiens Homo sapie	http://w gal-bin/c Feng Lian http://fu Faraday P	/clone_lib="Homo sapiens FETAL BRAIN" /note="Organ: brain; Vector: pCMVSPORT_6; 1st st was primed with a Not1-oligo(dT) primer. Five pr was miched, double-strand cDNA was digested with N cloned into the Not I and EcoRV sites of the pCM vector. Library was not normalized." 291 a 229 c 274 g 272 t 5 others h 88.5%; Score 868.4; DB 13; Length 1071; Similarity 99.0%; Pred. No. 66-222;	Valive 1; Mismatches 8; Indels 0; Gaps SCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGGGG 75	ACTCTCTTGCCAGGATCTTCTGGATGACCTGAAACTAGGAACTTGAAATTTGAAATTTGAAATTTGAAATTTGAAATTTGAAATTTGAAATTTGAAATTTGAAATTTGAAATTTGAAATTTGAAATTTGAAAATTTGAAAATTTGAAAATTTGAAAATTTGAAAATTTGAAAATTTGAAAATTTGAAAATTAATTAATTGTGGCTCTGATGAAACCTCTCGGCTTTATGATGAACTTATGAACTGAAAATTTGAAAATTAATT	376 CCTGAAGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAA 435
KEYWORDS SOURCE ORGANISM REFERENCE ACTHORS TITLE JOGNARL COMMENT	FEATURES Source	BASE COUNT ORIGIN Query Match Best Local	Matches Qy Db Db Qy Cy Cy Db		
92 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGCCACAGATGAGGAGCATCCTGACT 141 111		QY 502 AGAGCCTGATGCTGGAATTGATGAAGTTGAAGATGCTCAGGCTTTATTT 561 1141111111111111111111111111111111111	Qy 682 ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAACTACTGCTGTT 741 111111111111111111111111111111111111	Qy 861 TCTGTTTAACATCA-GGAAGGAATTTG-CCACCTCTTTATTCCATG 918 IIII	RESULT 3 BX441583 LOCUS BX441583 LOCUS BX441583 Homo sapiens FETAL BRAIN Homo sapiens cDNA clone CSODFOL9YK11 5-PRIME, mRNA sequence. ACCESSION BX441583.1 GI:30775951

Page

```
DB 13;
87.5%; Score 858.4; DB 13
94.9%; Pred. No. 3.1e-219;
                                             15; Mismatches
                                             Conservative
                       Similarity
                                          892;
                                                                                                                                                                                                                                                                           142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1043
  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                922
                       Best Local
Matches 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 5
BX417429
                                                                                          ò
                                                                                                                                   g
                                                                                                                                                                                ò
                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                      ŝ
                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/wol_type="mRNA"
/wol_type="mRNA"
/db_xref="taxon:9606"
/clone="CSD1030YL18"
/tlssue_type="PLACENTA COT 25-NORMALIZED"
/clone_lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
/clone_lib="Homo sapiens PLACENTA"
/clone_lib="Homo sapiens PLACENTA COT 25-NORMALIZED"
/clone_lib="
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Genoscope
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
BRail: seqreféqenoscope.cns.fr, Web : www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
more information about this cluster, see
http://www.genoscope.cns.fr/
cg1-bin/cluster.cg1?seq-CSODI030DF09QPl6cluster=2353.r. Contact :
Feng Liang Bmail : fliangelifetech.com URL :
Feng Liang Email : fliangelifetech.com URL :
http://willlength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID : CSODI030DF09QPl.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST 08-MAY-2003
                                                                                                                                                        782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BX379189 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens CDNA clone CSODIO30YL18 5-PRIME, mRNA sequence.

BX379189.1 GI:30446777
                                                                722
                                                                                                             615
                                                                                                                                                                                                                                                                                                735
                                                                                                                                                                                                                                                                                                                                              902
                                                                                                                                                                                                                                                                                                                                                                                           795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Euteleostomi;
              GCTAACAGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCT
                                                                                                                              616 GGAACACGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGA
                                                                                                                                                                                                                                              GGAACACGAAGKTGTNCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGA
                                                                                                                                                                                                                                                                                              TITCAAATIGAGGAAACCATIGACCGCGAGACTICIGGCAAITIAGAGCAACTACICCIT
                                                                                                                                                                                                                                                                                                                      GCTGTTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCT
                                                                                                                                                                                                                                                                                                                                                                                                              ATGAAGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAG
                                                                                                           TTATTTCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTT
                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Butele
Mammalia; Eutheria, Primates, Catarrhini, Hominidae; Homo.
I (basea I to 120.
11, W. B., Gruber, C., Jessee, J. and Polayes, D.
Full-length, CDNA libraries and normalization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTGATCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTT 896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ношо
                                                                                                                                                      733
                                                                                                                                                                                                                                                                                            9/9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            963
                                                                                                         556
                                                                                                                                                                                                                                                                                                                                                                                      38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 4
BX379189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                            요
                                                                                                      ò
                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                       윤
                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                  윱
                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
```

1042 ä 322 382 262 141 201 261 442 321 502 381 562 622 742 441 501 682 802 922 561 621 681 862 741 801 982 961 CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT 921 81 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG 22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT **AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA** 503 AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC 442 GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGCCCTCTATTATGCTATGAAG 502 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT 682 ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT . 9 Length 1201; Indels 961 **AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGC**

BX417429 Homo sapiens PLACENTA Homo sapiens cDNA clone CSODE009Y116

us-09-970-969-3.rst

685

745 621 805 681 865 741 925 801 985 861

561

```
BX398791 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
 GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                              AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                          CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                         CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                682 ATTGAGGAAACCATTGACCGGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGC 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         clone CS0DI064YH19 5-PRIME, MRNA sequence. BX398791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BX398791.1 GI:30613780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1102
                 929
                                                                            989
                                                                                                         295
                                                                                                                                                                       622
                                                                                                                                                                                                                                                                                           742
                                                                                                                                                                                                                                                                                                                                                        802
                                                                                                                                                                                                                                                                                                                                                                                                                 862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 6
BX398791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                            음
                                                                          g
                                                                                                                                    g
                                                                                                                                                                    δ
                                                                                                                                                                                               d
                                                                                                                                                                                                                             ŏ
                                                                                                                                                                                                                                                           임
                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                            οŽ
                                                                                                      ò
                                                                                                                                                                               Contact: Genoscope
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Internation about the Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
more information about this cluster, see
http://www.genoscope.cns.fr/
cg1-bin/cluster.cg1?seq-cS0bE009BE08QPl&cluster-2353.r. Contact :
Feng Liang Email: fliang@lifetcch.com URL:
Feng Liang Email: fliang@lifetcch.com URL:
Franday Avenue Genoscope sequence ID : CS0bE009BE08QPl.
                                                                                                                                                                                                                                                                                                                                                                                                                        /Mo_rref="taxon:9606"
/db_xref="taxon:9606"
/clone="CSODE009YI16"
//clone_lib="Homo sapiens PlaCENTA"
/note="Vector: pcMVSPORT_6; lst strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoRV sites of the pcMVSPORT 6 vector. Library was not normalized."

a 260 c 297 g 295 t 39 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              262 ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              322 AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         382 GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        442 GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCCTTCAGGCTAAC 501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81
                                                                                      Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. [4 bases 1 to 1201)
Li.W.B., Gruber,C., Jessee,J. and Polayes,D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGCCACAGGTTCTCAGAGGCACTGTGACTTCCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               87.2%; Score 855.2; DB 13; Length 1201; 95.0%; Pred. No. 2.3e-218; tive 10; Mismatches 30; Indels 7;
                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo saplens"
/mol_type="mRNA"
5-PRIME, mRNA sequence.
BX417429
BX417429.1 GI:30654405
                                                            saptens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                al Similarity 95.0%
893; Conservative
                                                                                                                                                                                                                                                                                                                                                                                 . .1201
                                                                            Homo sapiens
                                                                                                                                                                    Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     310 a
                                                              Ношо
                                              EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S.
Matches 893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      142
                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BASE COUNT
                                                                                                                                                  TITLE
JOURNAL
COMMENT
              ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ογ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=cSODIO64CDIOQPl&cluster=2353.r. Contact :
Feng Liang Enail : fliangelifetech.com URL :
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID : CSODIO64CDIOQPl.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutherla; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 996)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /clone="CSODIO64YH19"
/tissuc_type="PlACENTA COT 25-NORWALIZED"
/clone_llb="Homo sapiens PLACENTA COT 25-NORWALIZED"
/note="lst strand cDNA was primed with a NotI-oligo(dT)
                                                                                                                                                                                                                                                                                                                                                                 Email: segref@genoscope.cns.fr, Web : www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
more information about this cluster, see
                                                                                    LI,W.B., Gruber,C., Jessee,J. and Polayes,D. Full-length cDNA libraries and normalization Unpublished
```

```
82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               322
                                                                                                                                                                                                                                                                                                                                                                           Query Match
         DEFINITION
                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                BASE COUNT
ORIGIN
                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
                           ACCESSION
                                   VERSION
KEYWORDS
SOURCE
                                                                                                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                        ä
                                                                                                   141
                                                                                                                                                                                 300
                                                                                                                                                                                                   261
                                                                                                                                                                                                                                      321
                                                                                                                                                                                                                                              441
                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                  561
                                                                                                                                                                                                                                                                                                                                                                                                    999
                                                                                                                                                                                                                                                                                                                                                                                                                              501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             741
                                                                                         81
primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the PORVSPORT 6 vector. Library was normalized.

192 c 248 g 256 t 18 others
                                                                                                                                                                       GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                     GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCTGGACT
                                                                                                                                                                                                                                                                                                                                                       AGAGACCCTGATGCAGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                               CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCATTTTAAGACTCTG
                                                                                                                                                                                                                                      ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                        AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                           GAACTGAGAGCCATCAAACAAGTTTATGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                               GTGGTGGGGACACTTCAGGGTACTACCAGGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                    CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                        Gaps
                                                                       1;
                                                      Length
                                                                       5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Score 851.6; DB 13;
; Pred. No. 1.9e+217;
15; Mismatches 5;
                                                    86.8%;
ilarity 97.6%;
Conservative 1
                                                             Best Local Similarity
Matches 856; Conserv
                          282
                                                                                                                                                                               241
                                                     Match
                                                                                        22
                                                                                                                          82
                                                                                                                                            181
                                                                                                                                                               142
                                                                                                                                                                                                  202
                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                    262
                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                        322
                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                          382
                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                               422
                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                  502
                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                    562
                                                                                                                                                                                                                                                                                                                                                                                                                                      199
                                                                                                                                                                                                                                                                                                                                                                                                                                                        622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      862
                          BASE COUNT
                                                     Query
                                                                                                                                                                                                                                                                                                                        9 9
                                                                                                                                                                                               à
                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                        8
                                                                                                                          à
                                                                                                                                          8
                                                                                                                                                              ò
                                                                                                                                                                           g
                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                       6 G 6
                                                                                                                                                                                                                                                                                                                                                                            ç
                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
```

RESULT 7 BX396240

```
EST 13-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
OT 25-NORMALIZED HOMO SAPIENS CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                               Craniata; Vertebrata; Euteleostomi;
Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="mnamo depress"
/mol_type="mnamo depress"
/db_xref="taxon:9606"
/clone="cSOD10141109"
/tissue_type="mnamo depress prime depress digested with Not I and cloned into the Not I and Ecor V sites of the potwsporr 6 vector. Library was normalized.

234 c 272 g 270 t 1 others
                                                                                                                                                                                                                                                                                                     Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Bmail: sequefégenoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
more Information about this cluster, see
http://www.genoscope.cns.fr
cg1-bin/cluster.cg1?seq=CS0D1014AE05QPlscluster=2353.r. Contact :
freq Library Example Example Corporation 1600
Faraday Avenue Genoscope sequence ID : CS0D1014AE05QPl.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTGTGGCTCTGATGAAACCCTCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAACTGAGAGCCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 848.2; DB 13; Length 1062;
Pred. No. 1.6e-216;
1; Mismatches 4; Indels 0;
                                                                                                                                                                                                                         L1,W.B., Gruber,C., Jessee,J. and Polayes,D. Full-length cDNA libraries and normalization
               BX396240 Homo sapiens PLACENTA COT 25-NORM clone CSODI014YI09 5-PRIME, MRNA sequence. BX396240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism-"Homo sapiens"
                                                                                                                                                               Eukaryota; Metazoa; Chordata;
Mammalla; Eutheria; Primatęs;
1 (bases 1 to 1062)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
1. .1062
                                                                               BX396240.1 GI:30624830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 86.5%;
llarity 99.4%;
Conservative 1
                                                                                                                        Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                        Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
Matches 850; Conserv
                                                                                                                                                                                                                                                                     Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
```

81

Gaps

. 8

```
298 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                     262 ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                         AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  862 CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                                                CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                  22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                        GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                               Length 1201;
 others
                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGC 961
 38
                                           13;
                                         Score 839.6; DB 13
Pred, No. 3.5e-214;
                                                                      11; Mismatches
 296
  6
 291
                                         85.6%;
  U
                                                                       Conservative
 257
                                                        al Similarity
896; Conserv
  đ
 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          682
                                                                                                                                                                                                                                                                          202
                                                                                                                                                                                                                                                                                                                                                                                                                                                   382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   742
                                                                                                                                                          82
                                                                                                                                                                                   238
                                                                                                                                                                                                                 142
                                                                                                                                                                                                                                                                                                                                                                                          322
                                           Query Match
                                                          Local
 BASE COUNT
ORIGIN
                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 σ
                                                                                                  ö
                                                                                                                            q
                                                                                                                                                        ŏ
                                                                                                                                                                                  q
                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                            쉽
                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                        ·원
                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                              EST 08-MAY-2003
                                                                                                                                           807
                                                                                                                                                                                                  867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BX379218 1201 bp mRNA linear EST 08-MAY-200: 38379218 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens CDNA CLONE CSODIO31YA16 5-PRIME, mRNA sequence.
                      687
                                                        561
                                                                                   747
                                                                                                                621
                                                                                                                                                                       681
                                                                                                                                                                                                                               741
                                                                                                                                                                                                                                                                                        801
                                                                                                                                                                                                                                                                                                       861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo saplens"
//organism="Homo saplens"
//mol_type="mRNA"
//db_xref="taxon:9606"
//clone="CSODIOJIXA16"
//tlssue_type="PLACENTA COT 25-NORMALIZED"
//clone_lib="Homo saplens PLACENTA COT 25-NORMALIZED"
//once="lst strand cDNA was primed with a NotI-oligo(dT)
//note="lst strand cDNA was primed with a NotI-oligo(dT)
//organism not land enriched, double-strand cDNA was
digested with Not I and cloned into the Not I and EcoR V
sites of the pCMVSPORT 6 vector Library was normalized."
                                                                                                                                                                                                                                            Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1201)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Bmail: seqrefégenoscope.cns.fr Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CSOD1031BA08QPlscluster=2353.r. Contact:
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CSOD1031BA08QPlscluster=2353.r. Contact:
http://fulllength.invitrogen.com// invitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CSOD1031BA08QPl.
                                                                                                             GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
              502 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                    CGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                               682 ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                        GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                 GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Li,W.B., Gruber,C., Jessee,J. and Polayes,D. Full-length cDNA libraries and normalization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BX379218.1 GI:30452736
                                                                                                                                                                                                                                                                                                                                                                                                                        1048 CTGTATWACATCAGG 1062
                                                                                                                                                                                                                                                                                                                                                                                                        862 CTGTTTAACATCAGG 876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo
                                                                                                                                                                      622
                                                                                                                                                                                                                                                                                      742
                                                                                                                                                                                                                                                                                                                                               802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 8
BX379218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                              q
                          셤
                                                       ò
                                                                               qq
                                                                                                              ç
                                                                                                                                        g
                                                                                                                                                                    ö
                                                                                                                                                                                                                             å
                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                     õ
                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                          윱
                                                                                                                                                                                                                                                                                                                                                                                                     ô
                                                                                                                                                                                                                                                                                                                                                                                                                                g
ò
```

895

801

955

861

826

561 706 621 766

```
BX358605 1076, bp mRNA linear EST 05-MAY-2003
BX358605 Homo sapiens PLACENTA COT 25-NORWALIZED Homo sapiens cDNA clone CSODIO41YI02 5-PRIME, mRNA sequence.
BX358605.1 GI:30382268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGA 799
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1076)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Genoscope
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY Cedex - France
Email: seqrefégenoscope.cns.fr, Web : www.genoscope.cns.fr
library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
more information about this cluster, see
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="mRNA"
/db_treff="texton:9606"
/clone="CSOD1041Y102"
/tissue_type="PLACENTA COT 25-NORMALIZED"
/clone_llb="Homo sapiens PLACENTA COT 25-NORMALIZED"
/note="1st strand cDNA was primed with a Not1-oligo(dT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CSODIG41BE01QP16cluster=2353.r. Contact
cgi-bin/cluster.cgi?seq=CSODIG41BE01QP16cluster=2353.r. Contact
Feng Liang Email: filang@lifetech.com/RL:
Feng Liang Email: filang@lifetech.com/InVitroGen Corporation 1600
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CSODIG41BE01QP1.
Location/Qualifiers
                                                                                                      CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                  CGAAGTGTGTCTCA-TTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                  681 AATTGAGGAAACC-ATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTG
                                                                                                                                                                                 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                             GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCCACCTCTTT 910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LI,W.B., Gruber,C., Jessee,J. and Polayes,D. Full-length cDNA libraries and normalization Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo saplens (human)
Homo saplens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EST
                                                                                                                                                                                 502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1001
                          527
                                                                             442
                                                                                                                              587
                                                                                                                                                                                                                                                                                       295
                                                                                                                                                                                                                                                                                                                                    707
                                                                                                                                                                                                                                                                                                                                                                                       622
                                                                                                                                                                                                                                                                                                                                                                                                                                          167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 10
BX358605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                           ò
                                                                                                                           g
                                                                                                                                                                                 à
                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol.type="mcNa"
//mol.type="mcNa"
//do_xref="two.xypes"mcNa"
//do_xref="two.xypes"ptAcENTA"
//clone="types"FPACENTA"
//clone_11b="thomo sapions PlaceNTA"
//clone_11b="thomo sapions"
//clone_11b="thom
                     AL542496 Homo sapiens PLACENTA Homo sapiens CDNA clone CS0DE012YI14 5-PRIME, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC 441
                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Euthoria; Primates; Catarrhini; Hominidae; Homo. [1 dases 1 to 1201)
Li W. B., Gruber, C., Jessee, J. and Polayes, D. Full-length cDNA libraries and normalization
                                                                                                                                                                                                                                                                                                                                                                                                                                Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Emalis sequencecope.cns.fr, web : www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
more information about this cluster, see
http://www.genoscope.cns.fr/
cg1.bin/cluster.cgi?seq-cS0DE012BE07QP1scluster-2353.r. Contact :
Feng Libral Emali : flang@lifetech.com URL :
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraddy Avenue Genoscope sequence ID : CS0DE012BE07QP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                  On Feb 15, 2001 this sequence version replaced g1:12874598 Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1201;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       85.5%; Score 838.4; DB 9;
98.2%; Pred. No. 7.3e-214;
tive 3; Mismatches 10;
                                                                                                AL542496
AL542496.2 GI:30547699
                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          875; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                               Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                   ACCESSION
                                                                                                                        VERSION
KEYWORDS
SOURCE
AL542496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                윰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
```

```
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     원
                                                                                                                                                                                                                                                                                                                                                                          合
                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1029
                                                                                                                                                                                                                                                                                     610
                                                                                                                                                                                                                                                                                                                     670
                                                              ä
                                                                                            250
                                                                                                                            310
                                                                                                                                                   550
                                                                                                                                                                                                                                                                                                     501
                                                                                                                                                                                                                                                                                                                                    561
                                                                                                                                                                                                                                                                                                                                                    730
                                                                                                                                                                                                                                                                                                                                                                   621
                                                                                                                                                                                                                                                                                                                                                                                   790
                                                                                                                                                                                                                                                                                                                                                                                                  681
                                                                                                                                                                                                                                                                                                                                                                                                                                  741
                                                                                                                                                                                                                                                                                                                                                                                                                                                 606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                861
                                                                                                            141
                                                                                                                                            201
                                                                                                                                                                           261
                                                                                                                                                                                                          321
                                                                                                                                                                                                                                       381
                                                                                                                                                                                                                                                                       441
primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR V sites of the DNVSPORT 6 vector. Library was normalized." 233 c 274 g 278 t 4 others
                                                                                                                                                                                                                                                                                                                                                                                                 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                          ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                        AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                  CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                          GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                     GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                             ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                       GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3;
                                                Length 1076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTT
                                                              16; Indels
                                            Score 835.8; DB 13;
Pred. No. 3.4e-213;
4; Mismatches 16;
                                             tch 85.2%;
al Similarity 97.4%;
866; Conservative
                       287
                                                                                                                                                                                                                        431
                                                                                                                                                                                                                                                                                                                                                                                                                                                850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              970
                                                                                                                                                                                                                                                      491
                                                                                                                                                                                                                                                                                     551
                                                                                                                                                                                                                                                                                                     442
                                                                                                                                                                                                                                                                                                                    611
                                                                                                                                                                                                                                                                                                                                   502
                                                                                                                                                                                                                                                                                                                                                  671
                                                                                                                                                                                                                                                                                                                                                                   262
                                                                                                                                                                                                                                                                                                                                                                                                  622
                                                                                                                                                                                                                                                                                                                                                                                                                                 682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              862
                                                                                                                                            142
                                                                                                                                                                          202
                                                                                                                                                                                                         262
                                                                                                                                                                                                                                                                                                                                                                                  731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                742
                                                                                                                                                                                                                                       322
                                                                                                                                                                                                                                                                      382
                                                                                                                                                                                                                                                                                                                                                                                                                791
                                              Query Match
Best Local
                                                                                                            83
                                                                                                                           251
                                                                                                                                                                                         371
                      BASE COUNT
ORIGIN
                                                              Matches
                                                                             å
                                                                                            g
                                                                                                                        셤
                                                                                                                                                                                       g
                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                     ŏ
                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                 õ
                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                               윱
                                                                                                                                                                                                                                                                                                                                                                                                                                ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                            ð
                                                                                                                                          ò
                                                                                                                                                      셤
                                                                                                                                                                     ò
                                                                                                                                                                                                        ç
```

RESULT 11 BX402751

```
EST 13-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               470
BX402751 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens cDNA clone CSODI084YA05 5-PRINE, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo saplens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/db_xref="taxon:9606"
/clone="CSODIOB4YA05"
/clone="Ib="Homo saplens PLACENTA COT 25-NORMALIZED"
/clone="lib="Homo saplens PLACENTA COT 25-NORMALIZED"
/note="1st strand cDNA was primed with a NotI-oligo(dT)
/note="ist strand cDNA was primed with 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: segref@genoscope.cns.fr, Web : www.genoscope.cns.fr
was normalized. Library was constructed by Life Technologies, a
division of Invitrogen. This sequence belongs to sequence cluster
                                                                                                                                                                                                                                                                     Euteleostom1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTGATGAGGGCGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2353.r For more information about this cluster, see http://www.genoscope.cns.fr/cgi-bin/cluster.cgi?seq-C31A1021ZG03QP1&cluster-2353.r. Contacfeng Liang Elang@lifetech.com URL : http://fulllength.invitrogen.com/ invitroGen Corporation 1600 Faraday Avenue Genoscope sequence ID : CS1A1021ZG03QP1.
                                                                                                                                                                                                                                                                     Craniata; Vertebrata; Eutele
Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                        Eukaryota, Metazoa, Chordata, Craniata, Vert. Mammalia, Eutheria, Primates, Catarrhini, Hor 1 (bases 1 to 1007)
Lii, W.B., Gruber, C., Jessee, J. and Polayes, D. Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 832.2; DB 13;
Pred. No. 3.1e-212;
); Mismatches 3; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Genoscope
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualiflers
1. .1007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                BX402751.1 GI:30607254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         84.8%;
99.6%;
                                                                                                                                                                                                            (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                            sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
Matches 834; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BASE COUNT
ORIGIN
                                                     DEFINITION
                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
COMMENT
                                                                                                                 ACCESSION
                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                             VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
```

us-09-970-969-3.rst

94.8%; Score 831.6; DB 9; Length 1201; Best Local Similarity 95.0%; Pred. No. 4.9e-212; Indels 11; Gaps Matches 911; Conservative 11; Mismatches 26; Indels 11; Gaps 22 ATGGCACAGGTCTCACAGGCATGTGACTGACTGATTTGATGAGGGGGTGAT 81 Indels 111111111111111111111111111111111111	Oy 82 GCAGAAACTCTTCGGAAGGCTATGAAGGCTTGGGCACAGATGAGGACCACTGACT 141	QY 202 TTTGGCAGGGATCTTCTGGAAGTGAGAACTAACTGGAAAATTTGAAAAATTA 261	Qy 322 AAGGGAGCTGGAACAATGAAAAAGTACTGACAGAATTATTGCTTCAAGGACACCTGAA 381 111111111111111111111111111111111111	42 GTGGTGGGGACACTTCAGGGTACTACCAGGGGTTGTTGGTTG			22
442 GTGGTGGGGGACACTTCAGGGTACTACCAGGGGATGTTGGTGGTTCTCCTTCAGGCTAAC	Oy Dot CAGGCTGGARACTTATTGGAGGA 621 OF	Qy 682 ATTGAGGAAACCATTGACGGGAATTTAGAGCAACTACTCCTTGCTGTT 741	Qy 802 GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATT 858 Db 111111111111111111111111111111111111	ALS47761 Homo sapiens PLACENTY clone CS0D10177J11 5-PRIME, ml ALS47761 GI:31269590 EST Homo sapiens (human)	eost r 8.	Invitrogen. This sequence belongs to sequence cluster 2353.r For more information about this cluster, see http://www.genoscope.cns.fr/ http://www.genoscope.cns.fr/ cgi-bin/cluster.cgi?seq=CsODIO17CE060Plscluster=2353.r. Contact : Feng Liang Email : filiang@elifetech.com (NL : http://fulllength.invitrogen.com/ InvitroGen Corporation 1600 Faraday Avenue Genoscope sequence ID : CsODIO17CE060Pl. Faraday Avenue Genoscope sequence ID : CsODIO17CE060Pl. i. 1201	/clone="CSODIO17YJ11" //tissue_type="PLACENTA COT 25-NORMALIZED" //clone_lib="Homo sapiens PLACENTA COT 25-NORMALIZED" //note="list strand cDNA was primed with a NotI-oligo(dT) //note="list strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and ECOR V sites of the pCNVSPORT 6 vector. Library was normalized." 311 a 252 c 305 g 306 t 27 others

743 621 803 681

561 683 501

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

E 1 (pases 1 to 1201)

E 1 (pases 1 to 1201)

E 11, W.B., Gruber.C., Jessee, J. and Polayes, D.

Full-length cDNA libraries and normalization

In npublished

On Feb 15, 2001 this sequence version replaced gi:12872460.

Contact: Genoscope

Genoscope - Centre National de Sequencage

BP 191 91006 EVRX cedex - France

BP 191 91006 EVRX cedex - France

BP 191 91006 EVRX cedex - France

Email: seqrefégenoscope.cns.fr / Web: www.genoscope.cns.fr

Library was constructed by Life Technologies, a division of

Invitrogen. This sequence belongs to sequence cluster 2353.r For

more information about this cluster, see

http://www.genoscope.cns.fr/

cgi-bin/cluster.cgi?seq-CSODE006DE050Pl6cluster-2353.r. Contact:

Feng Liang Email: filliang@lifetech.com URL:

http://fulllength.invitrogen.com/ Invitrogen Corporation 1600

Faraday Avenue Genoscope sequence ID: CSODE006DE050Pl.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AL541412 Homo sapiens PLACENTA Homo sapiens cDNA clone CSODE006KJ10 AL541412 Homo sapiens cDNA clone CSODE006KJ10 AL54141E, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                     861 TCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGAT
                                                                                                                                                        562 CAGGCTGGAGACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                         CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                  GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTA-TTATGCTATGAA
GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCCTTCAGGCTAAC
                                                                   502 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 921 TAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGC 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/mol_type="mRRN"
/mb_xref="taxon:9606"
/clone="CSODE006xJ10"
/tissue_type="PLACENTA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AL541412.2 GI:30545565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EST.
                                                                                                                                                                                                                                                                              682
                                                                                                                                                                                                                                                                                                                                                                                                                     801
 442
                                624
                                                                                                     584
                                                                                                                                                                                                         622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AL541412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                               요
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                           QΥ
                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                             윤
                                                                   ò
                                                                                                  임
                                                                                                                                    ò
                                                                                                                                                                       셤
                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/mol_type="mRNA"
/Mol_type="mRNA"
/dolou="cs00A003Y805"
/tissue_type="NEUROBLASTOMA"
/clone="Lib="Homo sapiens NEUROBLASTOMA"
/clone_tib="Homo sapiens NEUROBLASTOMA"
/clone_tib="Homo sapiens NEUROBLASTOMA"
/clone_tib="top" primer. Flve prime end enriched,
double-strand cDNA was digested with Not I and cloned into
the Not I and EcoRV sites of the pcMVSPORT 6 vector.
Library was not normalized.

17 a 257 c 303 g 297 t 27 cehen-
                                                                                                                                                                                Unpublished
On Feb 13, 2001 this sequence version replaced g1:12781009.
Contact: Genoscope
- Centre National de Sequencage
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Email: seqref@enoscope.cns.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
Intp://www.genoscope.cns.fr,
cg1-bin/cluster.cg17seq-CSODA003CC030P1scluster-2353.r. Contact:
Feng Liang Email: fliang@lifetech.com URL:
http://fulllength.invitrogen.com/ Invitroden Corporation 1600
Faraday Avenue Genoscope sequence ID: CSODA003CC03QP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ë
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22 ATGGCACAGGTTCTCAGAGGCACTGTCACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ch 84.5%; Score 828.6; DB 9; Length 1201; Il Similarity 93.5%; Pred. No. 3.1e-211; 880; Conservative 14; Mismatches 40; Indels 7;
                                                                                                                                      1 (bases 1 to 1201)
LI,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-length cDNA libraries and normalization
 sednence
CS0DA003YF05 5-PRIME, MRNA
                                AL517516.2 GI:30534896
                                                                   Homo sapiens (human)
                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loca
Matches
                                                                                   ORGANISM
              ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                    REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ដ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
```

us-09-970-969-3.rst

```
1092
  919
                                                                                                                                                                                                                                                                                                                                                                                               22
                                                                                                                                                                                                                                                                                                                                                                                                            176
                                                                                                                                                                                                                                                                                                                                                                                                                           82
                                                                                                                                                                                                                                                                                                                                                                                                                                                        142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               416
                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                              BASE COUNT
ORIGIN
                                                          DEFINITION
                                                                                                     ORGANISM
                                                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                     RESULT 15
ALS83578
                                                                         ACCESSION
                                                                               VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                   FEATURES
                                                   LOCUS
               q
                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                                                                                           õ
                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
/clone_lib="Homo sapiens PlACENTA"
/note="Vector: pCMVSPORT_6; 1st strand cDNA was primed
with a Not1-oligo(dT) primer. Five prime end enriched,
double-strand cDNA was digested with Not I and cloned into
the Not I and ECORY sites of the pCMVSPORT 6 vector.
Library was not normalized." 38 others
                                                                                5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                         315
                                                                                                                                                                                                                                                                                                                 675
                                                                                                     375
                                                                                                                                                                                 381
                                                                                                                                                                                                                                                        555
                                                                                                                                                                                                                                                                        441
                                                                                                                                                                                                                                                                                     615
                                                                                                                                                                                                                                                                                                   501
                                                                                                                                                                                                                                                                                                                                561
                                                                                                                                                                                                                                                                                                                                              735
                                                                                                                                                                                                                                                                                                                                                            621
                                                                                                                                                                                                                                                                                                                                                                         795
                                                                                                                                                                                                                                                                                                                                                                                                      852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         918
                                                                                                                                                      CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG 201
                                                                                                                                 AATTGAGGAAACCATTGACCGGGGACTT-CTGGCAATTTAGAGCAACTACTCCTTGCTG
                                                                                                                          GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                                              GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                             GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                            CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                             ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGG-TTTCCAGGAGTGAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GATCTGTTTAACATCAGGAGGTTTAGGAAGAATTTTGCCACCTCTTTATTCCATG
                                                                                 Gaps
                                                                                7;
                                                                 Length 1201
                                                                                Indels
                                                                Score 822; DB 9; I
Pred. No. 1.9e-209;
8; Mismatches 29;
                                                                               18;
                                                                83.8%;
94.3%;
                                                                                Conservative:
                                                                        1 Similarity
886; Conserv
                                           315
                                                                                                           961
                                                                 Match
                                                                                              22
                                                                                                                          82
                                                                                                                                                      142
                                                                                                                                                                   316
                                                                                                                                                                                  202
                                                                                                                                                                                               376
                                                                                                                                                                                                              262
                                                                                                                                                                                                                            436
                                                                                                                                                                                                                                           322
                                                                                                                                                                                                                                                        496
                                                                                                                                                                                                                                                                       382
                                                                                                                                                                                                                                                                                                   442
                                                                                                                                                                                                                                                                                                                919
                                                                                                                                                                                                                                                                                                                               202
                                                                                                                                                                                                                                                                                                                                                           562
                                                                                                                                                                                                                                                                                                                                                                        736
                                                                                                                                                                                                                                                                                                                                                                                                     964
                                                                                                                                                                                                                                                                                                                                                                                                                   681
                                                                                                                                                                                                                                                                                                                                                                                                                                 856
                                                                                                                                                                                                                                                                                                                                                                                                                                                740
                                                                                                                                                                                                                                                                                                                                                                                                                                                              916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             800
                                                                        Local
                                           BASE COUNT
ORIGIN
                                                                              Matches
                                                                 Query
                                                                                                                                                                                                                                                                                                            g
                                                                                                          a
                                                                                                                         ç
                                                                                                                                  셤
                                                                                                                                                õ
                                                                                                                                                                g
                                                                                                                                                                                  ð
                                                                                                                                                                                             g
                                                                                                                                                                                                        ŏ
                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                     6 6
                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                 $ g
                                                                                                                                                                                                                                                                                                                                                                                                                               g. 3
                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
/organism="Homo sapiens"
/organism="mnna"
/mol_type="mnna"
/db_xref="taxon:9606"
/clone="CSODE004YD21"
/tissue_type="PLACENTA"
/clone_lib="Homo sapiens PLACENTA"
/clone_lib="Homo sapiens PLACENTA"
/clone_lib="Homo sapiens PLACENTA"
/clone_lib="Homo sapiens Placenta"
/note="vector: pCMYSPORT_6; lst strand cDNA was primed
/note="vector: pCMYSPORT_6; lst strand cDNA was primed
/note="vector: pCMYSPORT_6; lst strand cDNA was primed
/note="vector: pCMYSPORT_6; lst strand cloned into
the Not I and EcoRV sites of the pCMVSPORT 6 vector.
Library was not normalized."
12 a 219 c 261 g 255 t 5 others
                                                                                                                                                                        mRNA linear EST 13-MAY-2003
Homo sapiens cDNA clone CSODE004YD21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               On Published
On Peb 16, 2001 this sequence version replaced gi:12952676.
Contact: Genoscope - Centre National de Sequencage
Genoscope - Centre National de Sequencage
BP 191006 EVRY cedex - France
Email: seqrefégenoscope.cns.fr, Web : www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r. For
more information about this cluster, see
http://www.genoscope.cns.fr/
cgl-bin/cluster.cgl?seq-CSODE004CB110P1scluster=2353.r. Contact :
Feng Liang Email: filang@iifetech.com URL :
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID : CSODE004CB110P1.
Location.doulifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                         Euteleostom1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  For
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGGCACAGGTTCTCAGAGGCACTGTCACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGCCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGGGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                      Vertebrata; Eutele
1; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1022;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 J. and Polayes, D. and normalization
                          ATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTC
                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota, Metazoa, Chordata, Cranlata, Ve
Mammalla, Eutheria, Primates, Catarrhini,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          83.6%; Score 820.4; DB 9;
llarity 99.1%; Pred. No. 4.6e-209;
Conservative 5; Mismatches 1;
                                                                                                                                                                N ALSB3578 Homo sapiens PLACENTA HO S-PRIME, mRNA sequence.
ALSB3578 ALSB3578.2 GI:30606551
                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 1022)
Li,WB., Gruber,C., Jessee,J.
Full-length cDNA libraries and
Unpublished
                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 840; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    282
```

```
535
                       595
                                      655
                                                                            681
                                                                                   834
                                                                                           741
                                                                                                                  954
                                                 381
                441
                               501
                                              561
                                                             621
                                                                                                  894
                                                                                                          801
CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                            CGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                            CIGITIAN 1021
                                                                                                                                        CTGTTTAA 869
                                              502
                                                     959
                                                                    716
                                                                            622
                                                                                           682
                                                                                                  835
                                                                                                         742
                                                                                                                 895
                                                                                                                                        862
                                                             262
                                                                                                                               g
               õ
                     g
                              õ
                                    ద
                                           õ
                                                  q
                                                           9
9
9
9
                                                                                 g 2
                                                                                                셤
                                                                                                        à
                                                                                                                셤
                                                                                                                        ð
                                                                                                                                       Š
                                                                                                                                              셤
```

Search completed: August 28, 2003, 19:38:13 Job time : 1677.67 secs THIS PAGE BLANK (USPTO)

```
August 22, 2003, 21:27:21; Search time 37.6667 Seconds (without alignments) 1377.971 Million cell updates/sec
                                                                                                                                                                                                                           1 MAGGCGHMAQVLRGTVTDFP......KGDTSGDYKKALLLLSGEDD 327
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                        1107863 seqs, 158726573 residues
                                                                       - protein search, using sw model
                                                                                                                                                                                                                                                                BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                               US-09-970-969-4
1639
                                                                                                                                                                                   Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                Scoring table:
                                                                     OM protein
                                                                                                                                                                                                                                                                                                                        Searched:
                                                                                                            Run on:
```

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

/SIDS1/gcgdata/geneseq/geneseqp-emb1/Aa1989.DAT:* /SIDS1/gcgdata/geneseq/geneseqp-emb1/Aa1990.DAT:* /SIDSI/gcgdata/genescq/genescqp.embl/AA1983.DAT:
/SIDSI/gcgdata/genescq/genescqp.embl/AA1983.DAT:
/SIDSI/gcgdata/genescq/genescqp.embl/AA1985.DAT:
/SIDSI/gcgdata/genescq/genescqp.embl/AA1985.DAT:
/SIDSI/gcgdata/genescq/genescqp.embl/AA1987.DAT:
/SIDSI/gcgdata/genescq/genescqp.embl/AA1987.DAT:
/SIDSI/gcgdata/genescq/genescqp.embl/AA1987.DAT:
/SIDSI/gcgdata/genescq/genescqp.embl/AA1987.DAT:
/SIDSI/gcgdata/genescq/genescqp.embl/AA1987.DAT: /SIDS1/gcgdata/geneseq/genesegp-embl/AA1996. /SIDS1/gcgdata/geneseq/genesegp-embl/AA1997. /SIDS1/gcgdata/geneseq/genesegp-emb1/AA1994 /SIDS1/gcgdata/geneseq/genesegp-emb1/AA1995 /SIDS1/gcgdata/geneseq/genesegp-emb1/AA1992 /SIDS1/gcgdata/geneseq/genesegp-emb1/AA1993 /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1980... /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1981... /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1982. /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1991 A_Geneseq_19Jun03: Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA2000.DAT:* /SIDS1/gcgdata/geneseqy-emb1/AA2001.DAT:* /SIDS1/gcgdata/geneseqy-emb1/AA2002.DAT:*

/SIDS1/gcgdata/geneseg/genesegp-emb1/AA1999

/SIDS1/gcgdata/geneseq/geneseqp-embl/AA1998

/SIDS1/gcgdata/geneseq/geneseqp-embl/AA2003.DAT

		Description	Modified human ann	Modified human ann	Modified human ann	Placental coaqulat	Vascular anti-coad	PAP-I. Homo sapie	S65T GFP variant/h	Amino acid sequenc	Human annexin V, c
		£	AAB50864	AAB50865	AAB50863	AAP80511	AAP91953	AAR13082	AAY13923	AAY84788	ABG31220
		69	22	22	22	Φ	10	12	20	77	23
		Match Length DB ID	327	327	327	320	320	320	320	320	320
æ	Query	Match	100.0	99.5	98.7	97.0	97.0	97.0	97.0	97.0	97.0
		Score	1639	1630	1618	1590	1590	1590	1590	1590	1590
;	Result	No.	-	7	m	4	ស	Q	7	œ	6

Novel modified annexin useful for imaging vascular thrombi and apoptosis; has N-terminal chelation site comprising amino acid

anticoagulant PP4	Annexin V/urokinas	PAP-I isolated fro	CPB-I. Homo sapie	Calphobindin I (CP	Human CPB-1 protei	Sequence vascular	Sequence vascular	Vascular anticoagu	CPB-1, Homo sapie	1	CPB-1. Homo sapie	S65T GFP variant/h	Mouse ischaemic co	S65T GFP variant/h	Rat annexin-V. Ra	Human annexin V pr	Modified annexin p	Lung cancer associ	Human placenta-der	Human NOVX polypep	Human placenta-der	S65T GFP variant/h	Human ovarian canc	Human cancer assoc	Anticoagulative PP	Amino acid sequenc	Novel human diagno	Annexin XI type I	Annexin XI type I	Lung cancer associ	Human polypeptide	Sequence vascular	å	VAC-beta. Synthet	Human protein SEQ
AAP90053	AAY92930	AAP82317	AAR26276	AAR41021	ABG32550	AAP80242	AAP80714	AAR11910	AAR26180	AAP91363	AAR25718	AAY13924	ABB57067	AAY13925	AAR75695	ABP56248	ABP56249	AAB58393	AAR03725	ABU54621	AAR03726 .	AAY13926	ABG96279	AAB43617	AAP91913	AAY84790	ABG19948	AAR34127	AAR34128	AAY07117.	ABP69394	AAP80715	AAP91954	AAR35754	AAM78665
10	21	σ	13	٦	23	σ	Q	12	-	10	13	20	23	20	16	24	24	21	11	24	11	20	23	21	10	N	a	1	14	a	23	5	ī	H	22
320	909	320	319	319	319	320	320	320	319	320	319	319	319	318	319	319	699	208	672	675	786	321	321	324	321	320	736	503	202	505	299	327	327	327	327
96.8	96.8	96.8	6.3	96.7	6.7	9.96	9.96	9.96	96.4	96.2	94.8	90.3	90.3	88.8	88.4	88.0	88.0	61.7	56.9	56.9	26.B	56.3	56.3	56.3	56.3	55.3	53.2	52.8	52.3	52.2	51.5	50.7	50.7	50.7	50.7
1587	1587	1586	1585	1585	1585	1584	1584	1584	1580	1577	1553	1479.5	1479.5	1455.5	1448.5	1442.5	1442.5	1012	932	932	931	923	923	923	922		872	9	S	S	₩.	831.5	831.5	831.5	831.5
10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	28	59	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
			٦,																,							• ,									

1107863

Total number of hits satisfying chosen parameters:

seq length: 0 seq length: 200000000

Minimum DB : Maximum DB :

ALIGNMENTS

Human; annexin; chelation site; nuclear imaging; apoptosis; transplant rejection. Modified human annexin, SEQ ID NO: 4. AAB50864 standard; Protein; 327 AA. 25-MAY-2000; 2000WO-US14324. 99US-0324096 16-MAR-2001 (first entry) (UNIW) UNIV WASHINGTON. WPI; 2001-080465/09. N-PSDB; AAC91369. Tait JF, Brown DS; WO200073332-A1 Homo sapiens. 01-JUN-1999; 07-DEC-2000. AAB50864; RESULT 1

```
Sequence
                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAB50863;
                                                                                                                                                                                                                              Query Match
  ö
                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                   ô
                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                        IASRIPEELRAIKOVYEEEYGSSLEDDVVGDISGYYORMLVVLLQANRDPDAGIDEAOVE 180
                                                                                                                                                                                                                                                                                            EQLLLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFA 300
                                                                                                                                                                                                                                                                                                                                                                     9
                                  The present sequence is a modified annexin having an N-terminal chelation site, which comprises an amino acid extension including a glycine and a cysteine residue. The modified annexin is useful for imaging vascular thromb or apoptosis which is associated with response to a chemotherapeutic agent or with rejection as a result of transplantation. The modified annexin can effectively reheate a radiouncilde and retain annexin bloactivity. It can be readily prepared in high radiochemical yield and with high radiochemical purity. In contrast to conventional conjugation chemistriae that provide a distribution of conjugation products, the modified annexin has a single chelation site remote from the site of biological activity.
                                                                                                                                                                                                                  ODAQALFQAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNL
                                                                                                                                                                                                                                                                                                                                 SAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEI
                                                                                                                                                                                                         1 MAGGCGHMAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEI
                                                                                                                                                                                          Gaps
                                                                                                                                                                                      ó,
                                                                                                                                                                     Length 327;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; annexin; chelation site; nuclear imaging; apoptosis;
transplant rejection.
extension which comprises a glycine and a cysteine residue
                                                                                                                                                                                        Indels
                                                                                                                                                                    100.0%; Score 1639; DB 22;
100.0%; Pred. No. 9.2e-143;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                               TSLYSMIKGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                         Modified human annexin, SEQ ID NO: 6.
                   English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAB50865 standard; Protein; 327
                 Page 33-35; 39pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-0324096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-MAY-2000; 2000WO-US14324
                                                                                                                                                                  Query Match
Best Local Similarity 100.0
Matches 327; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (UNIW ) UNIV WASHINGTON
                                                                                                                                                 327 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200073332-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo saptens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-DEC-2000
                  Claim 15;
                                                                                                                                                   Sequence
                                                                                                                                                                                                                                              19
                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAB50865;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rait JF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAB50865
                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
a
                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                       염
                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                셤
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IASRTPEELRAIKQVYEERYGSSLEDDVVGDTSGYQRMLVVLLQANRDPDAGIDEAQVE 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 IASKTPEELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVE 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EQLILAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                   chelation site, which comprises an amino acid extension including a glycine and a cysteine residue. The modified annexin is useful for imaging vascular thrombi or apoptosis which is associated with response to a chemotherapeutic agent or with rejection as a result of transplantation. The modified annexin can effectively chelate a radionuclide and retain annexin bloactivity. It can be readily prepared in high radiochemical yield and with high radiochemical purity. In distribution of conjugation chemistries that provide a distribution of conjugation the site of biological activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MAGGCGHMAOVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAOROEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QDAQALFQAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGF0IEETIDRETSGNL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                            The present sequence is a modified annexin having an N-terminal
                                                                                                      apoptosis, has N-terminal chelation site comprising amino acid
extension which comprises a glycine and a cysteine residue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 327;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                annexin; chelation site; nuclear imaging; apoptosis;
                                                                            Novel modified annexin useful for imaging vascular thrombi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99.5%; Score 1630; DB 22;
99.7%; Pred. No. 6.2e-142;
tive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TSLYSMIKGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 18; Page 37-38; 39pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Modified human annexin, SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-MAY-2000; 2000WO-US14324.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAB50863 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity 99.7
Matches 326; Conservative
2001-080465/09.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               transplant rejection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         327 AA;
                         N-PSDB; AAC91370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200073332-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-DEC-2000
```

~

```
320 AA;
              Homo sapiens
                                EP279459-A.
JP03219875-A
                                                                                19-FEB-1988;
                                                                                                   20-FEB-1987;
                                                                                                            23-JUL-1987;
                                                            24-AUG-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 308
                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAP91953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 5
AAP91953
ID AAP9
XX
AC AAP9
    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                             SAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEI 120
                                                                                                                                                     The present sequence is a modified annexin having an N-terminal chelation site, which comprises an amino acid extension including a glycine and a cysteine residue. The modified annexin is useful for imaging vascular thrombi or apoptosis which is associated with response to a chemotherapeutic agent or with rejection as a result of transplantation. The modified annexin can effectively chelate a radiouncide and retain annexin bloactivity. It can be readily prepared in high radiochemical purity. In contrast to conventional conjugation chemistries that provide a distribution of conjugation products, the modified annexin has a single chelation site remote from the site of biological activity.
                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MAGGCGHMAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEI
                                                                                                                                                                                                                                                                                                                                                 IASRTPEELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVE
                                                                                                                                                                                                                                                                                                                                                                                                                             EQLILAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Placental coagulation inhibitor; disseminated vascular coagulation;
                                                                                                Novel modified annexin useful for imaging vascular thrombi and apoptosis, has N-terminal chelation site comprising amino acid extension which comprises a glycine and a cysteine residue -
                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                98.7%; Score 1618; DB 22; Length 327; 99.4%; Pred. No. 8e-141; 1ve 0; Mismatches 2; Indels 0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TSLYSMIKGDISGDYKKALLLLSGEDD 327
                                                                                                                                      Claim 12; Page 30-31; 39pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAP80511 standard; protein; 320 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Placental coagulation inhibitor.
          99US-0324096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (updated)
(updated)
(first entry)
                                                                                                                                                                                                                                                                                                         Best Local Similarity 99.4 Matches 325; Conservative
                            (UNIW ) UNIV WASHINGTON
                                                                   WPI; 2001-080465/09.
N-PSDB; AAC91368.
                                                Tait JF, Brown DS;
                                                                                                                                                                                                                                                                             327 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-MAR-2003
10-MAR-2003
12-NOV-1990
          01-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      thrombosis.
                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAP80511;
                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAP805
셤
                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZXXXDDDXXXX
ZXXXDDDXXXX
                                                                                                                                                                                                                                                                                                                                      δŏ
                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
```

```
187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                             This polypeptide exhibits strong anticoagulant activities and is useful for the treatment and prevention of e.g. thrombosis or disseminated intravascular coagulation in the brain, heart and peripheral blood vessels, such as cerebral and myocardial infarction. It has no antigenicity against man and can be produced in large amts. using
                                                                                                                                                                                                                                                                      Recombinant placental coagulation inhibitor – useful for the preventior and treatment of thromboses or disseminated intra-vascular coagulation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    128 ELRAIKOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                188 QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         to add missing OS field.)
to correct PF field.)
to correct PR field.)
to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97.0%; Score 1590; DB 9 99.7%; Pred. No. 3e-138; Live 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAP91953 standard; protein; 320 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page ?; ?pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                 Suda M;
                                       87JP-0037227.
87JP-0184428.
88EP-0102468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 99.7
Matches 319; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (Updated on 10-MAR-2003 (Updated on 25-MAR-2003 (Updated on 25-MAR-2003 (Updated on 25-MAR-2003
                                                                                                                                               Saino Y, Iwasaki A,
                                                                                                                                                                                    WPI; 1988-236733/34.
WPI; 1991-329110/45.
N-PSDB; AAN81113.
                                                                                                       (KOWA ) KOWA CO LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         recombinant methods
```

ö

```
KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                             WPI; 1991-222905/30.
N-PSDB; AAQ12679.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     320 AA;
                                                                                                                                                                                gla-domain; VKDP
                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                13-DEC-1990;
                                                                                                                                                                                                                                                                                  29-DEC-1989;
                                                                                                                                                                                                                         WO9109953-A
                                                                                                                     25-MAR-2003
30-SEP-1991
                                                                                                                                                                                                                                                                                                                          Foster DC;
                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     68
         308
                                                                                                  AAR13082;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                    AAR13082
                                                           RESULT
          õ
                            셤
                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This vascular anti-coagulating protein (VAC)-alpha is used in the preparation of monoclonal antibodies (MAbs). The VAC-alpha is injected into a host animal, in conjugation with eap keyhole limper haemocyanin, and the B-cells from immunised hosts are then fused with myeloma cells. The resultant hybridomas (VAA-8 and VAA-9) produce Abs specific to VAC-alpha. Abs can be used as immunossay reagents to detect VAC proteins, as affinity ligands for protein purifico, and as medicaments for binding and/or neutralising VAC proteins in vivo. See also AAN91354 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEBSILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ELRAIKQVY EEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                   Vascular anti-coagulating proteins; hybridomas; B-cells; myelomas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        / Match 97.0%; Score 1590; DB 10; Length 320; Local Similarity 99.7%; Pred. No. 3e-138; hes 319; Conservative 0; Mismatches 1; Indels 0
                                                                                                                                                                                                                                                                                                              Monoclonal antibodies to vascular anti-coagulating proteins hybridomas producing such antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       (Updated on 10-MAR-2003 to add missing OS field.) (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                    Location/Qualifiers
1..320
/product=VAC-alpha protein
                                               Vascular anti-coagulating protein-alpha
                                                                                                                                                                                                                                                                                                                                           Disclosure; flg 1; 11pp; German.
                                                                                                                                                                                                                                           (BOEH ) BOEHRINGER INGELHEIM.
                                                                                                                                                                                                                        88DE-3810331
                                                                                                                                                                                                    88DE-3810331
                            (first entry)
                                                                                        - Homo sapiens
- Mus musculus
         (updated)
                   (updated)
                                                                                                                                                                                                                                                                                WPI; 1989-293724/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      320 AA;
                                                                                                                                                                                                                                                                                             N-PSDB; AAN91353
                                                                                                                                                                                                    26-MAR-1988;
                                                                                                                                                                                                                        26-MAR-1988;
                            30-JUL-1989
                                                                                                                                                            DE3810331-A.
        25-MAR-2003
                                                                                                                                                                                05-ocr-1989
                                                                                                                                                                                                                                                                Gunther A;
                                                                                       Chimeric
Chimeric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sednence
                                                                                                                                                                                                                                                                                                                                                                                                                                                EP-181465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            248
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
```

```
120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ELRAIKQYY EEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEFTIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This sequence, or a fragment of it, is used in the construction of bybrid phospholipid-blinding proteins (PBP) comprising at least one lipocortin phopholipid binding domain (PBD). e.g. of PAP-I, joined to a gla-domainless vitamin K-dependent protein, e.g. protein C or activated protein C. See AAQ12680-81 for such examples. See also AAQ12678-81. (Updated on 25-WAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                              ..
¥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Recombinant prodn. of hybrid phospholipid-binding proteins comprising lipocortin phospholipid-binding domain and
                                                                                                                                                                                                                                                                                                                                                                                                              Phopholipid; binding protein; lipocortin; domain; vitamin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97.0%; Score 1590; DB 12; 99.7%; Pred. No. 3e-138;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. 3e-138;
0; Mismatches 1;
                                                                                                                                                             Š
KGDTSGDYKKALLLLCGEDD 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Fig 7; 57pp; English.
                                                                                                                                                          AAR13082 standard; Protein; 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               90WO-US07335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  89US-0459082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          vitamin K-dependent protein
                                                                                                                                                                                                                                                                          (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 319; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ZYMO ) ZYMOGENETICS INC
```

ö

9 63

```
Domain
                                                                                                                                                                                                                                                                                                                     RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    xey.
                                                                                                                                                                                                                                                                                                                                    AAY84788
                             g
                                                                                                                                                                                                             a
                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                      d
                                                             ð
                                                                                         임
                                                                                                                     ò
                                                                                                                                                 g
                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This sequence represents an example of a protein of the invention.

The proteins are bifunctional Aequorea victoria green fluorescent protein composed annexin fusion proteins, where the GFP and annexin moleties provide greater or equal fluorescent intensity and anionic phospholipid binding affinity, respectively, than do the corresponding unfused GFP and annexin proteins. An early manifestation of apoptosis is the loss of the asymmetric distribution of plasma membrane phospholipids, which results in exposure of anionic phospholipids on the extracellular leaflet of the plasma membrane. The GFP-annexin V fusion proteins are used for the detection of apoptotic cells by flow cytometry or fluorescent microscopy. The fusion proteins provide for homogeneously labelled annexin, with fluorescence properties that do not change upon binding membrane phospholipids, unlike prior art FITC-labelled annexins, where quenching or FITC-annexin V fluorescence by 40-50% occurs upon binding phospholipid
                 248 VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 307
                                                                                                                                                                                                                                                                                 GFP; green fluorescent protein; annexin; fusion protein; apoptosis; fluorescent intensity; anionic phospholipid binding affinity; asymmetric distribution; plasma membrane phospholipid; apoptotic cell detection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bifunctional fusion protein useful for the detection of apoptotic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 1590; DB 20; Length 320;
Pred. No. 3e-138;
); Mismatches 1; Indels 0
                                                                                                                                                                                                                                                      S65T GFP variant/hAnnexin V protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 2; Page 14-15; 23pp; English.
                                                                                                                                                              AAY13923 standard; protein; 320 AA.
                                                                           308 KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97US-0948276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98WO-US21444
                                                                                                                                                                                                                          (first.entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (REGC ) UNIV CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-277634/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           320 AA;
                                                                                                                                                                                                                                                                                                                                                              Aequorea victoria
                                                                                                                                                                                                                                                                                                                                                                               Homo saptens.
                                                                                                                                                                                                                                                                                                                                                                                                                        W09919470-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-OCT-1997;
                                                                                                                                                                                                                          13-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                     22-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              membranes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ernst JD;
                                                                                                                                                                                            AAY13923;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                   RESULT 7
                                                                                                                                                 AAY13923
                            g
                                                          õ
                                                                                      셤
```

```
180
                                                                                                             247
                                                                                                                                             240
187
                                                                                                                                                                            307
                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Annexin; phospholipid; antithrombotic; antitumor; antinflammatory; coating; thrombogenic biomaterial; labelling compound; negative charge.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    chemical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present sequence represents an annexin polypeptide. The domain of annexin, which may be modified, is used to construct the chemical compounds of the invention. The specification describes chemical compounds which have an affinity for a phospholipid. The chemical compounds comprise at least one chemical platform comprising six residues supporting a set of chemical functions that are capable of binding to the phospholipid and at least partly define the affinity of the structure for the phospholipid. The compounds act as phospholipid sequesters. The compounds are useful for preparing antithrombotic, antitumor and antiinflammatory medicaments, for making coatings for thrombogenic biomaterials, and for preparing labelling compounds useful for analysing and detecting negative
                                                                                                                                                                                             ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLIQANRDPDAGIDEAQVEQDAQALF
                                                                248 VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI
                                                                                                             188 QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chemical structure having affinity for phospholiphd comprises chemical platform comprising six residues supporting set of chemical functions that are capable of binding to phospholipid -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Guerois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cordier OF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ENERGIE ATOMIQUE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
16..91
/note= "domain 1"
                                                                                                                                                                                                                                                                                                                                                          Ą
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (COMS ) COMMISSARIAT ENERGIE ATOMI(UYPA-) UNIV CURIE PARIS VI P & M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Neumann JM,
                                                                                                                                                                                                                                                           301 KGDISGDYKKALLLLCGEDD 320
                                                                                                                                                                                                                                          308 KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Amino acid sequence of annexin V.
                                                                                                                                                                                                                                                                                                                                                        AAY84788 standard; peptide; 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 13; Fig 6b; 63pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98FR-0012366.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98FR-0012366.
                                                                                                                                                                                                                                                                                                                                                                                                                          38-AUG-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rosso MF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-320664/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FR2784106-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 02-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Jnidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-APR-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sanson A,
             61
                                               128
                                                                                                                                                                                                                                                                                                                                                                                          AAY84788;
```

ö

Gaps

ö

ö

Conservative

Local Similarity es 319; Conserv

Best_Loca

a à

```
29-OCT-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-NOV-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-MAR-2003
01-NOV-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07-JUN-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EP318703-A.
                                                                                                                                                                                                                                                                                                                                                                                                                               308
                                                                                                                                                                                                                                                                             89
                                                                                                                                                                                                                                                                                                                 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAP90053;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAP90053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT
 8588888888888888888888888888888
                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                           õ
                                                         ö
                                                                                                                                                    187
                                                                                                                                                                       180
                                                                                                                                                                                                                                       127
                                                                                                                                                                                          247
                                                                                                                                                                                                                              307
                                                                                              9
                                                                           67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                damage to
by stroke,
                                                                                                                                                                                                                                                                                                                                                                                                          Human; annexin V; delta RACK; delta protein kinase C; deltaPKC; VI domain; vasotropic; cerebroprotective; deltaV1-1; deltaV1-2; RACK; pseudo-delta receptor for activated C-kinase; deltaV1-5; PKC; protein kinase C; signal transduction; cell growth; gene expression; ion channel activity; translocation; hypoxia; stroke; ischaemic damage; creatine kinase.
                                                                                     1 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                         FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE
                                                                                                                                                    ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                             8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                         QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                             VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI
                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention discloses peptides comprising deltaV1-1, deltaV1-2,
                                                         ö
                                      Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New delta protein kinase C peptide for reducing or enhancing cells or tissues exposed to ischemic or hypoxic event caused or for protecting tissue from damage due to ischemia -
                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                         Human annexin V, containing a delta RACK binding site.
charges on cell surfaces and microvesicles in blood
                                                         1;
                                     DB 21;
                                     Score 1590; DB 21
Pred. No. 3e-138;
0; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (STRD ) UNIV LELAND STANFORD JUNIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 45; Page 64-65; 65pp; English.
                                                                                                                                                                                                                                                                                                                                  ABG31220 standard; Protein; 320 AA
                                                                                                                                                                                                                                                                             301 KGDTSGDYKKALLLCGEDD 320
                                                                                                                                                                                                                                                                   KGDTSGDYKKALLLLSGEDD 327
                                      97.0%;
                                              99.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-NOV-2001; 2001MO-US47556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-JAN-2001; 2001US-262060P
                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                              Best Local Similarity 99.7
Matches 319; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-599715/64.
                   320 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mochly-Rosen D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200257413-A2
                                                                                                                                                                                                                                                                                                                                                                      05-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-JUL-2002
                  Sequence
                                                                                                               89
                                                                                                                                 61
                                                                                                                                                    128
                                                                                                                                                                     121
                                                                                                                                                                                                          181
                                                                                                                                                                                                                             248
                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                  308
                                                                                                                                                                                                                                                                                                                                                     ABG31220;
                                      Query Match
                                                                                                                                                                                                                                                                                                                RESULT
                                                                                                                                                                                                                                                                                                                        ABG312;
SXS
                                                                          ð
                                                                                            음
                                                                                                               ò
                                                                                                                                음
                                                                                                                                                                     셤
                                                                                                                                                                                                         පු
                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                      ç
                                                                                                                                                                                         à
```

```
derivatives or fragments. Protein kinase (PkC) is a key enzyme in signal transduction involved in a variety of cellular functions including cell growth, regulation of gene expression and ion channel activity. The coll growth, regulation of different PKC isozymes to different areas of the cell in turn appears due to binding of the activated isozymes to the specific anchoring molecules (RACKs). Peptides that miller either the PKC-binding site on RACKs or the RACK binding site on PKC are isozyme specific anchoring molecules (RACKs). Peptides that miller either the PKC-binding site on RACKs or the RACK binding site on PKC are isozyme specific cranslocation inhibiting translocation or function of deltapkC. The deltapkC agonists or antagonists are useful in activating or inhibiting translocation or function of deltapkC. The deltapkC agonists or antagonists are useful in reducing, enhancing or protecting against damage to cells or tissues due to ischaemic or hypoxic event caused by stroke. Acute administration of the peptides, conjugated to a carrier peptide or a Tat-derived peptide, protected hearts against ischaemic damage as shown by decreased release of creatine kinase. The data indicate that in an intact heart, inhibition of deltapkC conferred greater than 50% protection against ischaemic damage. The sequence presented is human annexin V, which contains a delta RACK binding site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
deltavl-5 or their
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ELRAIKOVY EEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
pseudo-delta receptors for activated C-kinase (RACK),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97.0%; Score 1590; DB 23; 99.7%; Pred. No. 3e-138;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No. 3e-138;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Anticoagulant; PP4 protein; thromboplastin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAP90053 standard; protein; 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      88EP-0118039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                87DE-3737239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               anticoagulant PP4 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 99.7
Matches 319; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (updated)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       320 AA;
```

us-09-970-969-4.rag

```
(updated)
(first entry)
                                                                                                                                                                              Best Local Similarity 99.4
Matches 318; Conservative
         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        deep vein thrombosis.
                       WPI; 2000-413098/36.
         Sun J, Yang
                                                                                                                                                      600 AA;
                                 N-PSDB; AAA11241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-FEB-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-MAR-2003
13-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-AUG-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                              AAP82317;
                                                                                                                                                                                                                                      89
                                                                                                                                                                                                                                                      341
                                                                                                                                                                                                                                                                                                       188
                                                                                                                                                                                                                                                                                                                     191
                                                                                                                                                                                                                                                                      128
                                                                                                                                                                                                                                                                                                                                                                      308
                                                                                                                                                                                                                                                                                                                                                                                                                              AAP82317
                                                                                                                                                       Sequence
                                                                                                                                                                      Query Match
         νin χ
                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                       AAP82317
 g
                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                      οχ
                                                                                                                                                                                                                                                                                                                                                                                     엄
                                                                                                                                                                              ö
                                                                                                                                                                                                                                                               187
                                                                                                                                                                                                                                                                                              247
                                                                                                                                                                                                                              FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 127
                                                                                                                                                                                                                                                                                                                             VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 307
                                                                                                                                                                                                                                                                                                                                      67
                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      carrier; thrombus; thrombolytic; fusion protein; fibrinolysis.
                                                                                                                                                                                             8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                      FGRDLLADDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE
                                                                                                                                                                                                                                                             ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                     OAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                              ö
                                                                                                                                                              Length 320,
                                             - and new recombinant protein, vectors, antibodies, etc., useful therapeutically and diagnostically.
                                                                                                                                                                              Indels
                                                                                             Amino acid sequence of anticoagulant PP4 protein. This inhibits blood coagulation at the thromboplastin stage. (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                             Score 1587; DB 10;
Pred. No. 5.6e-138;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (SHAN-) SHANGHAI INST BIOCHEMISTRY CHINESE ACAD.
                                                                                                                                                                             1; Mismatches
                                                                               Claim 1; page 11 and Table 1; 12pp; German
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Annexin V/urokinase fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                      AAY92930 standard; Protein; 600 AA
                                                                                                                                                                                                                                                                                                                                                                      Kupper
                                                                                                                                                            96.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99CN-0113524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99CN-0113524
                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                    Local Similarity 99.4 hes 318; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      thrombocyte;
insect cell;
(BEHW ) BEHRINGWERKE AG
                               WPI; 1989-166767/23
                                                                                                                                              320 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CN1247195-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Annexin V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              urokinase;
                                                                                                                                                                                                                             68
                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                              Sequence
                                                                                                                                                                                                                                                             128
                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                             188
                                                                                                                                                                                                                                                                                                                            248
                                                                                                                                                                                                                                                                                                                                                                                                                                      AAX 92930;
                                                                                                                                                                                                                                             19
                                                                                                                                                            Query Match
                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                               AAY92930
                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                            셤
                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                          쉽
                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                            õ
```

```
ö
                                                                                                                               Annexin V, which has high affinity for active thrombocytes, is used as a carritar molecule to build a thrombus-tragething thrombolytic fusion protein. The protein (this sequence) is the result of expression of a fusion gene comprising the Annexin V gene and a low-molecular urokinase gene, in insect cells. The Annexin V-scu-pa.32 fusion protein, expressed in insect cell strain Th-5B1-4, has high affinity for active thrombocytes and has the fibrinolytic activity of urokinase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        248 VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVWVSRSEIDLFNIRKEFRKNFATSLYSMI

    comprises

                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
.
                                                                                                                                                                                                                                                                                                                                                                                     96.8%; Score 1587; DB 21; Length 600; 99.4%; Pred. No. 1.4e-137; ive 1; Mismatches 1; Indels · 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAP-I isolated from biological fluid, used as anticoagulant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAP-I; anticoagulant; anti-inflammatory agent; phospholipid; phospholipase A2; disseminated intravacular coagulation;
New thrombolytic fusion protein for targetting thrombus fusion of Annexin V and urokinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 2; Page 2-4; 20pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 standard; protein; 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         88WO-US00340
```

œ

```
JP04198195-A
                                         28-NOV-1990;
                                                           28-NOV-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JP05213769-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                     17-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-AUG-1993
                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                           189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR41021;
    õ
                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           141 VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 300
                                                                                                                                                                                                                                                                                                                                                                68 FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 127
                                                                                                                                                                                                                                                                                                                                                                                                      ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF 187
                                                                                                                                                                                                                                                                                                                                     8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL 67
                                                                                                         Human proteins having anticoagulant and antiinflammatory activity - . isolated from biological fluid by anion-exchange chromatographoc media.
                                                                                                                                                                                                                                                                                                                                                                                                                                            QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                 indicating that PAP-I is probably not constitutively secreted.

The Met residue is removed at in a post-translational event and the newly formed NH2-terminal Ala residue is blocked by acetylation. It binds to phospholipid and inhibits phopholipase A2. The protein can substitute heparin or other anticoagulants in the treatment of dissemnated intravaccular coagulation, deep vein thrombosis, or other disorders. It also has antiinflammatory
                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                     Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CPB-I; stabilisation; frozen; molten; processed; activity
                                                                                                                                                                                                                                                                                  Score 1586; DB 9; Length 3
Pred. No. 6.9e-138;
0; Mismatches 2; Indels
                                                                                                                                                      The protein does not contain a leader peptide sequence,
                                                                                                                                                                                                                                            (Updated on 25-MAR-2003 to correct PA field.)
                                                           Carter BLA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR26276 standard; protein; 319 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KGDTSGDYKKALLLLCGEDD 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                      Disclosure; Page ?; ?pp; English.
                                                                                                                                                                                                                                                                                  96.8%;
99.4%;
87US-0011782
87US-0059355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (updated)
(first entry)
                                                                                                                                                                                                                                                                                              Best Local Similarity 99.4
Matches 318; Conservative
                            (ZYMO ) ZYMOGENETICS INC.
                                     UNIV WASHINGTON
                                                          Fujikawa K, Irani MH,
                                                                           WPI; 1988-235049/33.
N-PSDB; AAN82107.
                                                                                                                                                                                                                                                                 320 AA;
06-FEB-1987;
05-JUN-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-MAR-2003
04-FEB-1993
                                                                                                                                                                                                                                      properties.
                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                     128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAR26276;
                                                                                                                                                                                                                                                                                   Query Match
                                      (UNIW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CPB-I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAR2627
윱
                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    윰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
```

```
69 GRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEE 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFO 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 LRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLISRSNAQRQEISAAFKTLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 GRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9 AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVV
                                                                                                                                                                                                                                                                                                                                                                                                 The sequence given is the amino acid sequence of CPB-I. CPB-I was used within a method which involved adding basic amino acids to it which resulted in its stabilisation. This lead to the production of CPB-I which keeps its activity when it is frozen, molten or has been
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Calphobindin I; CPB-I; Protein kinase C; PKC; inhibition; tumour.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 319;
                                                                                                                                                                                                                                                       Stabilisation of CPB-1 for drug compsn. - by adding basic aminoacid selected from lysine, arginine and/or ornithine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  processed by several procedures. (Updated on 10-MAR-2003 to add missing OS fleld.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96.7%; Score 1585; DB 13; 99.7%; Pred. No. 8.5e-138;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                 (KAGA ) KAGAKU OYOBI KESSEI RYOHO.
(KOWA ) KOWA CO LTD..
                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 2; 4pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR41021 standard; protein; 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GDTSGDYKKALLLCGEDD
90JP-0328286
                                                        90JP-0328286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best_Local Similarity 99.7 Matches 318; Conservative
                                                                                                                                                                                                  WPI; 1992-288937/35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      319 AA;
```

ö

Fri

```
26-FEB-2001: 2001JP-0050297
                                                                                                                                                                                                                                                                                                                                                                                         249
                                                                                                                                                                                                Seguence
                                                                                                                                                                                                                                                                                                                                                        189
                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                         Local
 g
                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                         GRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEE 128
                                                                                                                                                                                                                                                                                  LRAIKOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQ 188
                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                             9 AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLF
                                                                                                                                                                                                                                                 AGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVV
                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; CPB-I; eye drop; ophthalmological; anexin V; corneal disease;
calcium/phospholipid binding protein; polyhydric alcohol.
                                                                                                                                                                  Intravenously, orally, intramuscularly, percutaneously or rectally
                                                                                                                                          of
1s
                                                                                                                                Calphobindin I (CPB-I) or recombinant calphobindin I (r-CPB-I) inhibits protein kinase C (PKC) and is useful in the treatment malignant tumours caused by abnormal activation of PKC. CPB-I extracted from human or animal organs and may be applied
                                                                                    Protein kinase C inhibitor effective against malignant tumours
                                                                                                                                                                                                                       ö
                                                                                                                                                                                                       Length 319;
                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                     Score 1585; DB 14;
Pred. No. 8.5e-138;
0; Mismatches 1;
                                          (KOWA ) KOWA CO LTD.
(KAGA-) 2H KAGAKU OYOBI KESSEN RYOHO KENKYUSHO
                                                                                              contg. (opt. recombinant) calphobindin I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ź
                                                                                                                                                                                                                                                                                                                                                                                                                          GDTSGDYKKALLLLCGEDD 319
                                                                                                               Claim 1; Page 2-3; 6pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                 GDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABG32550 standard; protein; 319
                                                                                                                                                                                                    96.78;
        92JP-0019032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-FEB-2002; .2002WO-JP01563.
                         92JP-0019032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                             al Similarity
318; Conserva
                                                                   WPI; 1993-299558/38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human CPB-1 protein
                                                                                                                                                                                    319 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          W0200267977-A1
       04-FEB-1992;
                         04-FEB-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             36-SEP-2002
                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                          69
                                                                                                                                                                                                                                                                                                           129
                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                             183
                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                              249
                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                         19
                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABG32550,
                                                                                                                                                                                                              Best Local
                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 15
8
                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                              à
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                68
                                                                                                                                                                                                                                                                                                                                                        but with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  69 GRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       129 LRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9 AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLF
                                                                                                                                                                                                                                                                                     The invention relates to eye drops contain CPB-1 (anexin V) and a polyhydric alcohol having a carbonyl value of not more than 5micro Mol. 4g. The eyes drops are for treating e.g. corneal diseases. Such eye drops are without unpleasant irritation upon dropping but wi satisfactory long-term storage stability. The present sequence is the human CPB-1 (calcium/phospholipid binding) protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                  Eye drops for treating e.g. corneal diseases, contain CPB-I and polyhydric alcohol with specific carbonyl value, without unpleasant irritation upon dropping but with satisfactory long-term storability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 319;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1585; DB 23;
Pred. No. 8.5e-138;
); Mismatches 1;
                                                             Ë
                                                                                                                                                                                                                                            Disclosure; Page 13-14; 16pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Search completed: August 22, 2003, 21:33:06
Job time : 39 secs
                                                                Inagi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GDTSGDYKKALLLCGEDD 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .;
0
(KOWA ) KOWA CO LTD.
(KAGA ) CHEMO-SERO-THERAPEUTIC
                                                             Shinoda Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96.78;
99.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches 318; Conservative
                                                                                                       WPI; 2002-674988/72
                                                                Naruse H, Sano M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                             319 AA;
```

THIS PAGE BLANK (USPTO)

```
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
```

OM protein - protein search, using sw model

August 22, 2003, 21:30:17; Search time 15 Seconds Run on:

(without alignments) 2096.477 Million cell updates/sec

Title: Perfect score: Sequence:

US-09-970-969-4 1639 1 MAGGCGHWAQVLRGTVTDFP......KGDTSGDYKKALLLLSGEDD 327

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283308 segs, 96168682 residues.

Searched:

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR_76:*
1: pirl:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

STIMMARTES

	Description	annexin V [validat	>	>	annexin V - chicke	annexin VI [valida	annexin VI - mouse	annexin IV - human	annexin IV - piq	annexin VI - rat	annexin IV - bovin	annexin - chicken	annexin XI form A	annexin XI form B	annexin XI - rabbi	annexin XI - human	annexin VIII - hum	annexin III - huma	Ϊ,	annexin III - rat	annexin VII - mous	annexin XII - Hydr	annexin VII - Afri	hypothetical prote	· II	annexin II - bovin	annexin II - rat	annexin II - mouse	annexin II - rat	annexin IX - fruit
SUMMARIES	ID	AQHUP	S27214	LURTS	LUCHS	AQHU68	S01786	A42077	LUPG4	S52844	LUBO4	JC2029	LUBO11	\$23447	LURB11	A53152	LUHU8	LUHU3	LUHU7	LURT3	S29170	LUJF12	S70644	S41022	LUHU36	LUBO36	S33700	LUMS36	S55277	LUFF9
	DB	-	П	٦	7	-	-	-	Н	-	-	N	-	-	-	~	-		-	Н	~		~	ď	-	-	~	-	~	-
	Length	320	320	319	321	673	673	321	318	673	319	671	503	502	503	505	327	323	488	324	463	316	512	9/9	339	339	339	339	341	296
	Query Match	97.0	93.7	88.8	78.0	56.9	56.9	56.3	56.2	56.2	55.8	54.7	52.8	52.8	52.7	52.2	50.7	49.0				43.8	43.4	43.3	42.6	42.4	42.3	42.2	41.6	41.6
	Score	1590	1536.5	1455.5	1279	932	932	923	921	921	914	896.5	865	865	863	855		802.5	779	775	773	718	711	709	698.5	694.5	693.5	691.5	82	682
	Result No.	1	7	m	₹	s	9	7	80	σ	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	28	29

A;Cross-references: EMBL:M18366; NID:9179131; PIDN:AAA35570.1; PID:9179132 R;Iwasaki, A.; Suda, M.; Nakao, H.; Nagoya, T.; Saino, Y.; Arai, K.; Mizoguchi, T.; S P. Bicchem. 102, 1261-1273, 1987 A;Title: Structure and expression of cDNA for an inhibitor of blood coagulation isola

annexin XIII, inte															
LUHUIS	JQ1298	LUFF10	JQ1297	A57076	B57076	LUCH2	LUGP1	LUHU	S28228	LURT1	A44118	LUMS1	E88452	LUPY1	LUJP1
Н	-	Н	٦	~	7	-	-		П	-	-	ч	~	-	~
316	340	321	340	316	357	339	346	346	346	346	343	346	322	341	346
41.4	41.4	41.4	41.2	40.9	40.9	40.7	39.6	39.3	39.3	38.7	38.4	38.2	35.5	35.4	33.3
649	678.5	678	675.5	671	671	666.5	649.5	644.5	644.5	633.5	630	625.5	582	581	545.5
0	_	Ŋ	ņ	4	ιŲ	ب	_	œ	6	0	_	C)	m	*	2

ALIGNMENTS

1 m 11000
N:Alternate names: endonexin II: libocortin V: placental anticoagulant protein: place
C; Species: Homo sapiens (man)
 C;Date: 30-Jun-1992 #sequence_revision 30-Jun-1992 #text_change 08-Dec-2000
C; Accession: D29250; A30206; A28076; S01016; A29417; A41514; A28038; C31953; S06646;
R; Pepinsky, R.B.; Tizard, R.; Mattaliano, R.J.; Sinclair, L.K.; Miller, G.T.; Brownin
J. Biol. Chem. 263, 10799-10811, 1988
A) Title: Five distinct calcium and phospholipid binding proteins share homology with
A) RELEVENTIMENT : A>ZOJJ) MULD:002/3202; FMID:2300303
A; Molecule type: mrnA
A; Residues: 1-320 <pep></pep>
A;Cross-references: GB:M21731; NID:9186969; PIDN:AAA36166.1; PID:9307116
Rigrundmann, U.; Abel, K.J.; Bohn, H.; Loebermann, H.; Lottspeich, F.; Kuepper, H.
Proc. Natl. Acad. SCI. U.S.A. 85, 3/08-3/11/, 1988
A FIGURE CONTRACTOR OF LAND AND AND AND AND AND AND AND AND AND
A; Accession: A30206
A; Molecule type: mRNA
A; Residues: 1-320 <gru></gru>
A, Cross-references: GB:M19384; NID:g189614; PIDN:AAB59545.1; PID:g189615
R; Kaplan, R.; Jaye, M.; Burgess, W.H.; Schlaepfer, D.D.; Haigler, H.T.
J. Biol. Chem. 263, 8037-8043, 1988
A,Title: Cloning and expression of CDNA for human endonexin II, a Ca(2+) and phosphol
A; Reference number: A28076; MUID:88228020; PMID:2967291
A;Accession: Azeu/o
A. MOLECULE LYPE:
A) Residues: 1-320 (NAR)
A/Cross-references: GB/03/45, NID: 9182111; FIDN: AAAA2386, 13; FID: 91821112
Kimaurer 1999/ 1.; Keutelingspeliger, C.F.M.; Fleters, J.; Booo, G.; Stratowa, C.; hau
EUI. J. BLOCKBEM. 174, 285-294, 1988
A.ILLIE: CIOULING WIN EAPLESSION OF COUR FOR INDIGEN VESCULED WILL COMPUTED. A OF ORDER OF THE STATE OF THE S
A:Accession: S01016
A. Molecule type: mRNA
A; Residues: 1-320 < MAU>
A; Cross-references: EMBL:X12454; NID:937636; PIDN:CAA30985.1; PID:937637
A; Note: part of this sequence was confirmed by protein sequencing
R;Funakoshi, T.; Hendrickson, L.E.; McMullen, B.A.; Fujikawa, K.
Biochemistry 26, 8087-8092, 1987
A, Title: Primary structure of human placental anticoagulant protein.
A; Reference number: A29417; MULD:88163463; PMID:2964863
A; Contents: amino-terminal acetylation
A A CCESSION: A 2941/
A MOLECULE LYPE: INKNA A. MOLECULE LYPE: INKNA A. MOSSIANS 1 - 220 /FILIN
A:Cross-references - EMBL M18366: NID:c179131: PIDN:ABA35570.1: PID:c179132

a a

67 9

Gaps

ö

247

```
Grandon.

Cycomment: Annexin V has been proposed to play a role in the inhibition of blood coag olipid-binding rather than proteolytic inactivation. It does not affect thrombin-depe cysuperfanily: annexin I; annexin proteolytic inactivation. It does not affect thrombin-depe cysuperfanily: annexin I; annexin proteoly cycle with the cycle of setting bredicted cycle of setting predicted cycle of setting predicted cycle on endonexin fold status predicted cycle on endonexin fold status predicted cycle on endonexin fold status predicted cycle on endonexin repeat homology caxis

F;100-116/Region: endonexin fold status predicted cycle on endonexin conclum, high affinity (Met, Glu, Gly, Glu) status predicted cycle on phosphate (Thr) (covalent) status predicted cycle on the cycle of the cycle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nationate continue continue capp33; CaBP37 (Species: Bos primigentus taurus (cattle) (Species: Bos primigentus (Species: Bos primigentus) 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Molecule type: protein
A;Residues: 1-35, Tr, 37-124, Er, 126-320 <LE2>
Note: It is uncertain whether the sequence differences are due to allelic variation
C;Comment: Annexins undergo reversible, calcium-dependent binding to membrane phospho
                                                                                                                (Leu, Gly, Gly, Asp) #status
(Met, Gly, Gly, Asp) #status
F;33,35,36/Binding site: calcium, low affinity (Thr, Glu, Glu) #status experimental F;73,78/Binding site: calcium, Low affinity (Leu, Glu) #status experimental F:100,102,104,144/Binding site: calcium, high affinity (Leu, Gly, Gly, Asp) #status F;259,261,263,303/Binding site: calcium, high affinity (Met, Gly, Gly, Asp) #status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241 VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVWVSRSEIDLFNIRKEFRKNFATSLYSMI 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      248 VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      68 FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181 QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                           Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                 DB 1;
                                                                                                                                                                                                                                                                                                                                          Pred. No. 4.2e-95;
0; Mismatches 1
                                                                                                                                                                                                                                                                                                 Score 1590;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301 KGDTSGDYKKALLLLCGEDD 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      308 KGDISGDYRKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                           97.08;
                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Molecule type: protein
A;Residues: 1-320 <LEA>
A;Accession: S27215
                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 319; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      annexin V - bovine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            derstood.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Cross-references: GDB:120555; OMIN:131230
A; Map position: 4426-4428
A; Introns: 3,3,3,2,1; 32,1,132/1; 158/3; 177/3; 209/1; 241/1; 260/3; 301/3
A; Introns: 3,3,3,2/1; annexin repeat homology
C; Superfamily: annexin repeat homology calcium binding; duplication; endonexin
F; 2-320/Product: annexin repeat homology calcium binding; duplication; endonexin
F; 2-45/Region: annexin repeat homology calcium
F; 29-45/Region: annexin repeat homology calcium
F; 29-45/Region: annexin repeat homology calcium
F; 20-151/Domain: annexin repeat homology calcium
F; 20-276/Region: endonexin fold #status predicted
F; 20-276/Region: endonexin fold #status fold fall (in mature form) #status experimental
F; 20-276/Region: endonexin high affinity (Met, Gly, Glu) #status experime
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Recule type: Droctin
A; Residues: 7-25;27-42;51-74, 'X', 76-151;181-198;202-207;209-226;228-238;246-271;277-282;
R; Ribber, R.; Schneider, M.; Mayr, I.; Roemisch, J.; Paques, E.P.
FEBS Lett. 275, 15-21, 1990
A; Title: The calclum binding sites in human annexin V by crystal structure analysis at 2
A; Reference number: A3726; MUDD:9108549; PMID:2148156
A; Contents: annotation; X-ray crystallography, 2.0 and the first, second, and fourth
R; Funakoshi, T.; Helmark, R.L.; Hendrickson, L.E.; McMullen, B.A.; Fujikawa, K.
Biochemistry 26, 5572-5578, 1987
A; Reference number: A29670; MUD:9108050045; PMID:2960376
A; Recession: A29670
A; Molecule type: protein
A; Realdues: 29-73;274-297;300-320 <FU2>
A; Relice the number: 137172; MUD:95047484; PMID:7950998
A; Title: The gene encoding human annexin V has a TATA-less promoter with a high G+C cont
A; Relice the number: 137172; MUD:95047484; PMID:7950998
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Residues: 1-320 <FRES>
A; Cross-references: EMBL:001691; NID:9430964; FIDN:AAB40047.1; PID:9430966
C; Comment: Annexins undergo reversible, calcium-dependent binding to membrane phospholif
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: protein
A; Residues: 85-93 <AHN>
R; Rothhut, B.; Comera, C.; Cortial, S.; Haumont, P.Y.; Diep Le, K.H.; Cavadore, J.C.; Cd
Biochem. J. 263, 929-935, 1989
A; Title: A 22 XDe lipocortin from human mononuclear cells appears to be identical with the A; Reference number: S06646; MUID: 90088443; PMID: 2532007
                                                                                              A.Molecule type: mRNA
A.Residues: 1-320 < IMAA
A.Residues: 1-320 < IMAA
A.Residues: 1-320 < IMAA
A.Residues: 1-320 < IMAA
A.Rollenger, D.D.; Mehlman, T.; Burgess, W. H.; Haigler, H.T.
Broc. Natl. Acad. Sci. U.S.A. 84, 6078-6082, 1987
A.Title: Structural and functional characterization of endonexin II, a calcium- and phos A.Reference number: A28038; MUID:87317598; PMID:2957692
A.Accession: A28038
A.Molecule type: protein
A.Residues: 86-131, W, 260-272, 274-297, 300-315, 'X', 317-320 < SCH>
B.Ahn, N.G.; Teller, D.C.; Blenkowski, M.J.; McMullen, B.A.; Lipkin, E.W.; de Haen, C.J. Biol. Chem. 263, 18657-18663, 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C:Comment: Annexin V has been proposed to play a role in the inhibition of blood coagula olipid-binding rather than proteclytic inactivation. It does not affect thrombin-depende
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Reference number: A92696; MUID:89066652; PMID:2974032
A; Accession: C31953
     A; Reference number: A41514; MUID:88139278; PMID:2963810
                                                           A; Molecule type: mR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Gene: GDB: ANX5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          derstood.
```

r

us-09-970-969-4.rpr

က

Page

```
A;Status: preliminary
A;Molecule type: profesp.
A;Residues: 6-20;85,′X′,87-88,′X′,90-93,′X′,95-96,′XX′,99-100,′X′,102-103,′XX′,106-10
C;Comment: Annexins undergo reversible, calcium-dependent binding to membrane phospho
F;71,76/Binding site: calcium, low affinity (Leu, Glu) *status predicted F;98,100,102,142/Binding site: calcium, high affinity (Leu, Gly, Gly, Asp) *status pr F;257,259,261,301/Binding site: calcium, high affinity (Met, Gly, Gly, Asp) *status p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A)Cross-references: GB:M30971; GB:J03194; NID:g211138; PIDN:AAA48591.1; PID:g211139
R;Fernandez, M.P.; Selmin, O.; Martin, G.R.; Yamada, Y.; Pfaeffle, M.; Deutzmann, R.;
J. Biol. Chem. 263, 3921-5925, 1988
A;Title: The structure of anchorin CII, a collagen binding protein isolated from chon
A;Reference number: A28623; MUID:88186917; PMID:2833522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Molecule type: mRNA
A; Residues: 1-118, 'LikCKILNKFNMOEYEANLGRNKITGRRHQAIFRDCWWSCCRQIEI',163-167,'E',169-32
A; Cross-references: GB:M30971; GB:J03194; NID:g211138
A; Cross-references: GB:M30971; GB:J03194; NID:g211138
B; Genge, B.R.; Wu, L.M.Y.; Adkisson IV, H.D.; Wuthler, R.E.
J. Biol. Chem. 266, 10678-10685, 1991
A; Title: Martix vesicle annexins exhibit proteolipid-like properties. Selective parti
A; Reference number: A40404; MUID:91244852; PMID:2037607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A,Molecule type: protein
A,Reladues: 188-199 (GEN>
A,Residues: 188-199 (GEN>
A,Experimental Source: epiphyseal growth plate cartilage (matrix vesicle-enriched mic
R,Boustead, C.M.; Brown, R.; Walker, J.H.
Bjothem. J. 291, 601-608, 1993
A,Title: Isolation, characterization and localization of annexin V from chicken liver
A,Reference number: 332523; MUID:93249384; PMID:8484740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N;Alternate names: anchorin CII; endonexin II; lipocortin V; placental anticoagulant C;Species: Gallus gallus (chicken)
C;Species: Gallus gallus (chicken)
C;Date: 30-Sep-1992 #sequence_revision 30-Sep-1992 #text_change 02-Jun-2000
C;Accession: A35381; A28623; B40404; S32523; S08771
R;Fernandez, M.P.; Selmin, O.; Martin, G.R.; Yamada, Y.; Pfaeffle, M.; Deutzmann, R.; J. Biol. Chem. 265, 8344, 1990
A;Reference number: A35381; MUID:90243721; PMID:2159478
                                                                                                                                                                                                                                                                                                                                             63 LVNDMKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTDEKVLTEITASRTPEELRA 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     243 RSIPAYLAETLYYAMKGAGTDDHTLIRVIVSRSEIDLFNIRKEFRKNFATSLYSMIKGDT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 LRGTVTDFSGFDGRADAEVLRKAMKGLGTDEDSILNLLTARSNAQRQQIAEEFKTLFGRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               132 IKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         252 RSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDT
                                                                                                                                                                                                              12 LRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRD
                                                                                                                                                                                                                                                                                                                       LLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLLAVVKSI
                                                                                                                                                             ä
                                                                                                           DB 1; Length 319;
                                                                                                                                                             Indels
                                                                                                        Query Match 88.8%; Score 1455.5; DB 1; Best Local Similarity 91.8%; Pred. No. 1.8e-86; Matches 291; Conservative 12; Mismatches 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SGDYKKALLLCGGEDD 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  312 SCDYKKALLLL-SGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: mRNA
A; Residues: 1-321 <FER>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        annexin V - chicken
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Contents: erratum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Accession: S32523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Accession: A28623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Accession: A35381
                                                                                                                                                                                                                                                                                                                    72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 4
                                                                                                                                                                                                                 õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C; Species: Rattus norvegicus (Norway rat)
C; Date: 30-Sep-1992 #sequence_revision 30-Sep-1992 #text_change 22-Jun-1999
C; Accession: C29250; S6680
R; Peplnsky, R.B.; Tizard, R.; Mattaliano, R.J.; Sinclair, L.K.; Miller, G.T.; Browning, J. Biol. Chan. 263, 10799-10811, 1988
A; Title: Five distinct calcium and phospholipid binding proteins share homology with lip A; Reference number: A92659; MUID:88273202; PMID:2968983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C:Comment: Annexin V has been proposed to play a role in the inhibition of blood coaguld oilpid-binding rather than proteclytic inactivation. It does not affect thrombin-depended
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N; Alternate names: endonexin II; lipocortin V; placental anticoagulant protein; placenta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C;Comment: Annexins undergo reversible, calcium-dependent binding to membrane phospholig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R; Imai, Y; Kohsaka, S.
Eur. J. Biochem. 232, 327-334, 1995
A; Title: Structure of rat annexin V gene and molecular diversity of its transcripts. A; Accession: S66680; MUID:96035863; PMID:7556178
A; Accession: S66680
A; Accession: S66680
A; Status: preliminary; translation not shown
A; Residues: 1-319 < IMA>
                                                                               ä
                                                                                                                                                                                                                                                             LRAIKOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQ 188
                                                                                                                                                                                                                                                                                                                                                                         GRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEE 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVV 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIK 308
                                                                                                                                                          AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLF
                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Molecule type: mRNA
A;Residues: 1-319 <PEP>
A;Cross-references: GB:M21730; NID:g205138; PIDN:AAA41512.1; PID:g205139
                              Length 320;
                                                                               Indels
,5; DB 1;
1.1e-91;
5;
                        Score 1536.5;
Pred. No. 1.1e<sup>-</sup>
5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GDTSGDYKKALLLCGGEDD 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GDTSGDYKKALLLL-SGEDD 327
                        93.7%;
96.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Cross-references: EMBL; D42136
                                                                             Conservative
                        Query Match
Best Local Similarity
Matches 309; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Accession: C29250
                                                                                                                                                                                                                                    69
                                                                                                                                                                                                                                                                                                                                        129
                                                                                                                                                                                                                                                                                                                                                                                                                                                   189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     annexin V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           derstood
                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
```

ď

182 251 242 311

191

131

71 62

Gaps

```
A.Molecule type: mRNA
A.Residues: 1-225, MK', 228-554, T', 556-673 <SUE>
A.Acrosas references: 81.03578; NID:g17975; PIDN:g179976
R;Yoshizaki, H.; Mizoguchi, T.; Arai, K.; Shiratsuchi, M.; Shidara, Y.; Maki, M.
J. Blochem. 107, 43-50, 1990 roperties of calphobindin II, an anticoagulant protein from h A.Title: Structure and properties of calphobindin II, an anticoagulant protein from h A.Reference number: JX0091; MUD:90236978; PMID:2139657
A.Accession: JX0091
A.Molecule type: protein
A.Residues: 2-299,307-314;320-445;447-549;581-673 <YOS>
R.Rayashi, H.; Owada, M. K.; Sonobe, S.; Kakunaga, T.
J. Biol. Chem. 264, 17222-17330, 1989
A.Title: Characterizations of two distinct Ca(2+)-dependent phospholipid-binding prot A.Recession: B34459; MUD:90008880; PMID:2529258
A; Molecule type: protein
A; Residues: 103-113;167-172, 'X', 174-177;232-235, 'F', 237-240;251-258;277-281;359-362,'
A; Residues: the sequence from Fig. 6 is inconsistent with that from Fig. 4 in having 619-
A; Note: the sequence from Fig. 6 is inconsistent with that from Fig. 4 in having 619-
A; Note: eight calcium ions are bound in the presence of phospholipid
R; Suedhof, T.C.; Slaughter, C.A.; Leznicki, I.; Barjon, P.; Reynolds, G.A.
Proc. Natl. Acad. Sci. U.S.A. 85, 664-668, 1988
A; Fitle: Human 67-kDa calelectrin contains a duplication of four repeats found in 35-
A; Accession: A31079.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Accession: B31953
A; Molecule type: protein
A; Molecule type: protein
A; Molecule type: protein
B; Molecule type: prote
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Experimental source: placenta
R; Ahn, NG.; Teller, D.C.; Blankowski, M.J.; McMullen, B.A.; Lipkin, B.W.; de Haen, C
J. Biol. Chem. 263, 18657-18663, 1988
A; Title: Sedimentation equilibrium analysis of five lipocortin-related phospholipase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Molecule type: protein
A;Residues: 10-25;69-75;136-151;192-207;209-220;300-306 <HAY>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Reference number: A92696; MUID:89066652; PMID:2974032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        52; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .254-325/Domain: annexin repeat homology <AX4>.265-281/Region: endonexin fold #status predict
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      homology <AX7>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  56.9%;
58.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;438-509/Domain: annexin repeat;449-465/Region: endonexin fold
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           annexin repeat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       '3/Domain: annexin repeat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              377-393/Region: endonexin fold
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;602-673/Domain: annexin repeat
;613-629/Region: endonexin fold
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              527-598/Domain: annexin repeat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                538-554/Region: endonexin fold
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 56.99
Best Local Similarity 58.1;
Matches 183; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    F; 265-281/Region:
F; 366-437/Domain:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Gene: GDB: ANX6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C; Genetics:
                       A; Molecule type: mrNA
A; Residues: 1-673 < IRM>
A; Residues: 1-673 < IRM>
A; Crompton, M.R.; Owens, R.J.; Totty, N.F.; Moss, S.E.; Waterfield, M.D.; Crumpton, M.J.
EMBO J. 7, 21-27, 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Title: Primary structure of the human, membrane-associated Ca(2+)-binding protein p68. A;Reference number: S00263; MUID:88196081; PMID:3258820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           coagul
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C;Species: Homo sapiens (man)
C;Species: 11.Mar.1992 *Requence_revision 30-Sep-1992 *text_change 08-Dec-2000
C;Accession: J10032; S00263; S18519; A31079; JX0091; B34459; B31953; A53507
R;Iwasaki, A.; Suda, M.; Matanabe, M.; Nakao, H.; Hattori, Y.; Nagoya, T.; Saino, Y.; J. Blochem. 106, 43-49; 1989
A;Rille: Structure and expression of CDNA for calphobindin II, a human placental coagu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N; Alternate names: calcium-binding protein, 68K; calelectrin; calphobindin II
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTILITSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Molecule type: mRNA
Ry Residues: 1-618, D', 620-673 <CR1>
A;Cross-references: EMBL:Y00097; NID:935217; PIDN:CAA68286.1; PID:935218
A;Accession: S18519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 321;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    32; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           78.0%; Score 1279; DB 1; 78.1%; Pred. No. 4.1e-75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    38; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OKDISGDYRKALLLCGGDD 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         308 KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 78.19
Matches 250; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        annexin VI [validated] - human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Accession: JU0032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
   derstood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              욥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
```

U

A;Molecule type: protein A;Residues: 'X',473-480,'DY' <HYA> C;Comment: This abundant cytosolic protein binds to the inner surface of the cell mem duplication; endonexin fold; phosp experimental mature form) #status Length 673 Indels A,Cornes references: GDB:119681; OMIM:114070
A,Map position: 5632-5634
C,Superfemily: annexin VI; annexin repeat homology
C,Keywords: accyllated maino end; calcium binding; duplice
C,Keywords: accyllated maino end; calcium binding; duplice
F;2-673/Product: annexin VI *status experimental cMAT>
F;2-673/Product: annexin VI *status experimental cMAT>
F;34-50/Region: endonexin fold *status predicted
F;36-50/Romain: annexin repeat homology cAX2>
F;106-122/Region: endonexin fold *status predicted
F;178-250/Domain: annexin repeat homology cAX3>
F;190-206/Region: endonexin fold *status predicted Score 932; DB 1; Pred. No. 2.1e-52; #status predicted homology <AX5> #status predicted homology <AX5> #status predicted #status predicted homology <AX8> predicted F; 2/Modified site: acetylated amino end (Ala) (in

Gaps

ö

ò

13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL 72

```
A; Roccale type: mRNA
A; Residues: 1-321 cTAL>
A; Accession: B42077
A; Molecule type: mRNA
A; Crossion: B42077
A; Molecule type: DNA
A; Redues: 87-129 cTAL>
A; Molecule type: DNA
A; Reference number: 507434; MUID:88309022; PMID:2970257
A; Accession: 507434
A; Condition and expression of cDNA coding for a new member of the phospholipas
A; Accession: 507434
A; Accession: 507434
A; Accession: 507434
A; Condition of type: MRNA
A; Condition of type: MRNA
A; Residues: 1-97, 0, 99-321 cGRU>
A; Cross-references: BMBL:M19383; NID:9189616; PIDN:AAC41689.1; PID:9189617
A; Cross-references: BMBL:M19383; NID:9189616; PIDN:AAC41689.1; PID:9189617
B; Ahn, N. G.; Teller, D. C.: Blenkowski, M.J.; McMullen, B.A.; Lipkin, E.W.; de Haen, C.J. Blod. Chem. 263, 18657-18663, 1988
A; Title: Sedimentation equilibrium analysis of five lipocortin-related phospholipase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: protein
A; Residues: 29-58;101-126;282-310 <AHN>
A; Residues: 29-58;101-126;282-310 <AHN>
A; Residues: 29-58;101-126;282-310 <AHN>
B; Tait, J.E.; Sakata, M.; McMullen, B.A.; Miao, C.H.; Funakoshi, T.; Hendrickson, L.E.
Biochemistry 27, 626-6276, 1988
A; Title: Placental anticoagulant proteins: isolation and comparative characterization
A; Reference number: A90534; MUID:89118212; PMID:2975506
A; Accession: A31046
A; Molecule type: protein
A; Residues: 4-17;30-74;102-146;283-321 <TA3>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       duplication; endonexin fold; glyco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           D.A.; Disteche, C.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N; Alternate names: endonexin I; placental anticoagulant protein II; PP4-X protein
                                         192
                                                                           252
                                                                                                                                                                                                             STPEYFAERLEKAMKGLGTRDNTLIRIMVSRSELDMLDIREIFRTKYEKSLYSMIKNDTS 310
                                                                                                                                                                                                                                                                                                   SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C; Species: Homo sapiens (man)
C; Date: 30-Jan-1993 #sequence_revision 26-May-1994 #text_change 22-Jun-1999
C; Date: 30-Jan-1993 #sequence_revision 26-May-1994 #text_change 22-Jun-1999
C; Accession A42077; B42077; S07434; A31953; A31046
Genomics 12, 313-318, 1992
A; Title: Circomosomal mapping of the human annexin IV (ANX4) gene.
A; Reference number: A42077; MUID:92155721; PMID:1346776
                                            KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL
                                                                                                                                                                           KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Reference number: A92696; MUID:89066652; PMID:2974032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C; Superfamily: annexin I; annexin repeat homology C; Keywords: acetylated amino end; calcium binding; 6F; 2-321/Product: annexin IV *status predicted <MAT>F; 919-90/Domain: annexin repeat homology <AXI>F; 91-67/Domain: annexin fold *status predicted F; 91-162/Domain: annexin repeat homology <AXI>F: 91-162/Domain: annexin fold *status predicted F; 9102-118/Region: endonexin fold *status predicted F; 9174-246/Domain: annexin repeat homology <AXI>F: 174-246/Domain: annexin repeat homology <AXII-F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: GDB:131395; OMIM:106491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1:|||||| | | ||
311 GEYKKALLKLCGGDD 325
                                                                                                                                                                                                                                                                                                                                                                                                                                        GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Map position: 2p13-2p13
A; Introns: 102/3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Accession: A31953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          annexin IV - human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Gene: GDB: ANX4
                                         133
                                                                                                                                                                                                                                                                                                                                                                       251
                                                                                                                                                                                                                                                                                                      253
                                                                                                                                                                                                                                                                                                                                                                                                                                        313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT
                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                            ç
                                                                                                      셤
                                                                                                                                                                       õ
                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Annexin VI - mouse

N.Alternate names: calcium-binding protein p68; calelectrin; calphobindin II
C.Species: Mus musculus (house mouse)
C.Date: 30-Sep-1989 #sequence_revision 26-May-1994 #text_change 22-Jun-1999
C.Date: 30-Sep-1989 #sequence_revision 26-May-1994 #text_change 22-Jun-1999
C.Date: 30-Sep-1989 #sequence_revision 26-May-1994 #text_change 22-Jun-1999
C.Accession: 201706
R.M.Oscoller, 201706
R.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             F:2/Modified site: acetylated amino end (Ala) (in mature form) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                       252
                                                                                                                                                                                                                                                                                                                                                                                                                                        250
                                                                                                                                                                                                                                                                                                   190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        70
                                     70
LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI
                                                                                                                                                                                                                                                                KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                      RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 673;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   80; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; Score 932; DB 1;
; Pred. No. 2.1e-52;
49; Mismatches 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               F;527-598/Domain: annexin repeat homology <AX7>
F;538-554/Region: endonexin fold #status predicted
F;602-673/Domain: annexin repeat homology <AX8>
F;613-629/Region: endonexin fold #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     56.9%; Score 932;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    59.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      186; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73
                                                                                               73
                                                                                                                                                                7.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Loca
Matches
                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                               ö
                                                                                                                                                                g
                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                ö
```

셤

à 윱 à g

à 8 ò 셤 ò 셤 ô

```
C.Species: Rattus norvegicus (Norway rat)
C.bate: 10-Sep-1999 sequence_revision 10-Sep-1999 stext_change 10-Sep-1999
C.bacession: S65683; S52844
R.Fan, H.; Josic, D.; Lim, Y.P.; Reutter, W.
Eur. J. Blochem. 230, 741-751, 1995
Eur. J. Blochem. 230, 741-751, 1995
A;Title: cDNA cloning and tissue-specific regulation of expression of rat calcium-bin A;Reference number: 865683; MUID:95331313; PMID:7607247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   endonexin fold; membrane-associate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              F;2/Modified site: acetylated amino end (Ala) (in mature form) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                   253
                                                               DDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIK 133
                                                                                           193
                                                                                                                                                                                                   254 IPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL 72
           GTVKAASGFNAAEDAQTLRKAMKGLGTDEDAIISVLAYRSTAQRQEIRTAYKSTIGRDLL 64
                                                                                                                                                                                                                                                                                                                                                                                                                             QVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGELK
                                                                                                                                                                                                                                                                                   WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Molecule type: mRNA
A;Residues: 1-673 <PAN>
A;Cross-references: EMBL:X86086; NID:9763180; PIDN:CAA60040.1; PID:9763181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              56.2%; Score 921; DB 1; I
58.7%; Pred. No. 1e-51;
tive 48; Mismatches 82;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A Experimental Source: liver
C; Superfamily: annexin VI; annexin repeat homology
C; Superfamily: annexin VI; annexin repeat homology
F; 2-67 Product: annexin VI #status predicted <AMTPF; 23 94 / Domain: annexin repeat homology <AXI>F; 34 -50 / Region: endonexin fold #status predicted
F; 95 - 166 / Domain: annexin repeat homology <AXI>F; 95 - 166 / Domain: annexin repeat homology <AXIPER; 106 - 122 / Region: endonexin fold #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       F;178-250/Domain: annexin repeat homology <AX3> F;190-206/Region: endonexin fold #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       F;254-325/Domain: annexin repeat homology <AX4> F;265-281/Region: endonexin fold #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        F;527-598/Domain: annexin repeat homology <AX7> F;538-554/Region: endonexin fold *status predicted F;602-673/Domain: annexin repeat homology <AX8> F;613-673/Domain: endonexin fold *status predicted F;613-69/Region: endonexin fold *status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N; Alternate names: calcium-binding protein 65/67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    homology <Ax5>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          homology <AX6>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 F;377-393/Region: endonexin fold
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repeat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ||:| ||:| || || DYRKVLLILCGGDD 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    F;449-465/Region: endonexin fold
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 56.2%
Best Local Similarity 58.7%
Matches 185; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       F;438-509/Domain: annexin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Accession: S65683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       annexin VI - rat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     73
                                                                                                                                                                                                                                                                                   194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              305
                                                                                              q
                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                               à
                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                   õ
                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Molecule type: protein
A;Residues: 1-318 <WEB>
A;Experimental source: intestinal epithellum
C;Comment: Annexins undergo reversible, calcium-dependent binding to membrane phospholip
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C. Superfamily: annexin I; annexin repeat homology
C. Keywords: blocked amino end; calcium binding; duplication; endonexin fold; glycoproteil
Fig. 16.87/Domain: annexin repeat homology <AXI>
Fig. 18.77/Pomain: annexin repeat homology <AXI>
Fig. 11.77/Region: endonexin fold facture predicted
Fig. 11.71.243/Domain: annexin repeat homology <AXI>
Fig. 11.7243/Domain: annexin repeat homology <AXI>
Fig. 18.74/Pomain: annexin repeat homology <AXI>
Fig. 24.7-318/Domain: annexin repeat homology <AXI>
Fig. 25.8-274/Region: endonexin fold facture predicted
Fig. 17.87/Region: endonexin fold facture predicted
Fig. 17.87/Region: endonexin fold facture predicted
Fig. 18.87/Region: endonexin fold facture (Probably acetylated) facture experimental
Fig. 18.87/Region: endonexin fold facture (Probably acetylated) facture experimental
Fig. 18.87/Region: endonexin fold facture (Probably acetylated) facture experimental
Fig. 18.87/Region: endonexin fold facture (Probably acetylated) facture experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              F;6/Binding site: phosphate (Thr) (covalent) (by protein kinase C) *status experimental F;124,244/Binding site: carbohydrate (Asn) (covalent) *status predicted
F;186-202/Region: endonexin fold #status predicted
F;250-321/Domain: annoxin repeat homology <AX4>
F;251-277/Region: endonexin fold #status predicted
F;251-277/Region: endonexin fold #status predicted
F;2/Modified site: acctylated amino end (Ala) (in mature form) #status predicted
F;9/Binding site: phosphate (Thr) (covalent) (by protein kinase C) #status predicted
F;247/Reinding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIK 133
                                                                                                                                                                                                                                                                                                                                                                                                                                              QVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGELK 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  254 IPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLENIRKEFRKNFATSLYSMIKGDTSG 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14 GTVTDPPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL 73
                                                                                                                                                                                                                                                                                                                                         73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14 GTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  56.2%, Score 921; DB 1; Length 318; 58.6%; Pred. No. 4.1e-52; ive 51; Mismatches 79; Indels
                                                                                                                                                                                             tch 56.3%; Score 923; DB 1; Length 321; al Similarity 58.3%; Pred. No. 3.1e-52; 183; Conservative 53; Mismatches 78; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score ...,
Pred. No. 4.1e-52;
...omatches 79; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ||:| ||:| || || DYRKVLLVLCGGDD 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 58.6
es 184; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                    74
                                                                                                                                                                                                Ouery Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                         Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loca
Matches
```

:: :: ::	<pre>ALYDAYELKHALKGAGTWEKVLT</pre>
QY 193 KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252	
191 KWGTDEAGFIYILGNRSKQHLRLVFDEYLKTTGKPIEASIRGELSGDFEKLMLAVVKCIR	QY 134 QVYEEEVGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGELK 193
253 SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS	126 OTYOLOYGRSLEDDIRSDTSFMFORVLVSLSAGGRDESNYLDDALMRQDAQDLYEAGEKK
DD 251 STPEYFAERLFKAMKGLGTRDNTLIRIMVSRSELDMLDIRELFRTKYEKSLYSMIKNDTS 310 Oy 313 GDYKKALLLLSGEDD 327	OY 194 WGTDERKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS 253
311 GEYKRALLKICGGDD	254 IDAYLAFTIYYAMKGAGTUNHTIRVMYGRSFIDLFUIRKEFRKKRFISYSHIKGDTSG
	246 KSAYFAERLYKSMKGLGTDDDTLIRVWVSRAEIDMLDIRANFKRLYGKSLYSFIKGDTSG
RESULT 10 LUBO4	OV 314 DYKKALLLESGEDD 327
annexin IV - bovine N; Alternate names: 32K calelectrin; chromobindin IV; endonexin; lipocortin IV; protein I	11:1 1:1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
σn •	
C; Accession: Allo/8; D45006; S59624; A45006; B45066; C45066; E45066; H45066 R; Hamman, H.C.; Gaffey, L.C.; Lynch, K.R.; Creutz, C.E.	-
chromobindin	annexin - chicken N:Alternate names: 67K lipld-dependent Ca2+-binding protein
	C.Species: Gallus gallus (chicken) C.Species: 30-Sep-1993 #sequence_revision 20-Aug-1994 #text_change 17-Mar-1999,
	C:Accession: JCZUZY R;Cao, X.; Genge, B.R.; Wu, L.N.Y.; Buzzi, W.R.; Showman, R.M.; Wuthier, R.E.
48; NID:9163C Matsumoto, I.	Biochem. Biophys. Res. Commun. 197, 556-561, 1993 A;Title: Characterization, cloning and expression of the 67-kDa annexin from chicken
J. Biol. Crem. 267, 20336-20339, 1992 A.FILE: Carbohydrate-binding proteins in bovine kidney have consensus amino acid sequen.	A; Reference number: JC2029; MUID:94092130; PMID:8267590 A.Accession: JC2029
	A,Molecule type: mRNA A,Residues: 1-671 <cao></cao>
(',24-25;29-48;101-107,'X',109-118;'X',194-197,'X',199,'X',	C;Superfamily: annexin VI; annexin repeat homology C;Keywords: calcium binding; phospholipid binding
NCBIP:116209,	F;21-92/Domain: annexin repeat homology <ax1> F;93-164/Domain: annexin repeat homology <ax2></ax2></ax1>
Note: Lnese Iragments are derived from a 33K protein that exhibited Ca++-dependent bin Note: 12-Met and 12-Tyr were also found	F;176-248/Domain: annexin repeat homology <ax3> F;252-323/Domain: annexin repeat homology <ax4></ax4></ax3>
T.	F;364-435/Domain: annexin repeat homology <ax5> F;436-507/Domain: annexin repeat homology <ax6></ax6></ax5>
ein A and lamellar bod	F;525-597/Domain: annexin repeat homology <ax7> F;601-671/Domain: annexin repeat homology <ax8></ax8></ax7>
	Query Match . 54.7%; Score 896.5; DB 2; Length 671;
	- :
C:Comment: Annexins undergo reversible, calcium-dependent binding to membrane phospholif derstood. C:Sinerfamily: annexin I: annexin reneat homology	QY 10 QVLRGIVIDEPGEDERADAETLERKAMKGLGIDEESILTILITSESNAGRGEISAAFKTLFG 69
C: Reportunity	Db 6 KVYRGSVKDFPGFNASQDADALCNAMKGFGSDKDALLDLITSRSNKQRLEICQAYKSQYG 65
F:17-88/Domain: annexin repeat homology <axi> F:28-44/Region: endonexin fold *status predicted</axi>	Qy 70 RDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEEL 129
F;89-160/Domain: annexin repeat homology <ax2> F;100-116/Region: endonexin fold #status predicted</ax2>	Db 66 KDLIADLKYELTGKFERLIVSLMRPPAYSDAKEIKDAIAGIGTDEKCLIEILASRTNQEI 125
F:172-244/Domain: annexin repeat homology <axx></axx>	OY 130 RAIKOVYEEEYGSSLEDDVVGDISGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQA 189
F:248-319/Domain: annoxin repeat honory AXX4> F:258-275/Readon: endonexin fold metatus predicted	Db 126 HDLVAAYKDAYERDLEADVVGDTSGHFKKMLVVLLQGAREEDDVVSEDLVEQDAKDLLEA 185
F:77Binding site: phosphate (Thr) (covalent) (by protein kinase C) *status predicted F:125,245/Binding site: carbohydrate (Asn) (covalent) *status predicted	190 GELKWGTDEEKFITIEGTRSVSHLRKVEDKYMTISGFQIEETIDRETSGNLEQLLLAVVR
tch 55.8%; Score 914; DB 1;	Db 186 GELKWGTDEAQFIYILGRRSKQHLRMVFDEYLKISGKPIERSIRAELSGDFEKLKLAVVK 245
Similarity 58.0%; Pred. No. 1.2e-51; 2; Conservative 51; Mismatches 81;	250 SIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRRNFATSLYSMIKG
Qy 14 GTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL 73	240
Db 6 GTVKAASGFNAAEDAQTLRKAMKGLGTDEDAIINVLAYRSTAQRQEIRTAYKTTIGRDLM 65	Qy 310 DTSGDYKKALL-LLSGEDD 327

```
A. Worke: the list of introns is incomplete
C. Superfamily: annexin VII: annexin repeat homology
C. Superfamily: annexin VII: annexin repeat homology
C. Superfamily: annexin VII: annexin repeat homology
F. 203-274/Domain: annexin repeat homology ARXI>
F. 214-230/Region: endonexin fold #status predicted
F. 215-346/Domain: annexin repeat homology ARXI>
F. 286-346/Domain: annexin repeat homology ARXI>
F. 286-302/Region: endonexin fold #status predicted
F. 388-780/Domain: annexin repeat homology AXXI>
F. 370-386/Region: endonexin fold #status predicted
F. 445-605/Domain: annexin repeat homology AXXI>
F. 445-461/Region: endonexin fold #status predicted
F. 451-461/Region: endonexin fold #status predicted
F. 611,113/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                  A; Molecule type: mRNA
A; Residues: 1-505 <1000.
A; Cross-references: EMBL:211742; NID:977; PIDN:CAA77801.1; PID:978
A; Towle, C.A.; Weissbach, L.; Treadwell, B.V.
Bjochim. Biophys. Acta 1131, 223-225, 1992
A; Title: A. Atternatively spliced annexin XI transcripts encode proteins that differ nea
A; Reference number: $36136; WUID:92305067; PMID:1535225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Molecule type: mRNA
A;Residues: 1-77 <TO2>
A;Cross-references: EMBL:211742
C;Comment: Annexins undergo reversible, calcium-dependent binding to membrane phospho
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           311 NRVYKTEFKKTLEEAIRSDISGHFQRLLISLSGGNRDESTNVDMTLVQRDVQELYAAGEN 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPRELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     253 SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      72
                                                                                                 C;Species: Bos primigenius taurus (cattle)
C;Date: 22-Nov-1993 #sequence_revision 10-Reb-1995 #text_change 22-Jun-1999
C;Accession: S23447; S36136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLJSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N;Alternate names: calcyclin-associated annexin protein CAP-50 C;Species: Oryctolagus cuniculus (domestic rabbit)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ouery Match 52.8%; Score 865; DB 1; I
Best Local Similarity 54.9%; Pred. No. 2.9e-48;
Matches 173; Conservative 58; Mismatches 84;
                                                                                                                                                                                                                             submitted to the EMBL Data Library, February 1992
A;Reference number: S23447
A;Accession: S23447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GDYRKILLKICGGND
                                                                                     annexin XI form B - bovine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Introns: 19/1; 58/2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        annexin XI - rabbit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Accession: S36136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: protein
A; Molecule type: protein
A; Residues: 213-223, 'X', 225-226;319-325,'G', 327-328,'X', 330-333,'Q', 335-339;441-450,'X',
A; Experimental source: lung
A; Experimental source: lung
A; Experimental source: lung
C; Comment: sequence modified after extraction from NCBI backbone
C; Comment: Annexins undergo reversible, calcium-dependent binding to membrane phospholification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               glycoprotein; phospholipid bin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A)Cross-references: GB.M82802; NID:g162673; PIDN:AAA30379.1; PID:g162674
A;Note: the authors did not translate the codon GAC for residue 503
R;Mizutani, A.; Usuda, N.; Tokumitsu, H.; Minami, H.; Yasui, K.; Kobayashi, R.; Hidaka, J. Blol. Chem. 267, 13498-13504, 1992
A;Title: CAP-50, a newly identified annexin, localizes in nuclei of cultured fibroblast A;Reference number: A42909; MUID:92317074; PMID:1618851
                                                                                                                                                                  N; Alternate names: calcyclin-associated protein peptide, CAP-50 C; Species: Bos primigenius taurus (cattle) C; Species: Bos primigenius taurus (cattle) C; Date: 31-Mar-1993 *Requence_revision 31-Mar-1993 *text_change 22-Jun-1999 C; Accession: A42113; A42909; B42909; C42309; D42909 R; Towle, C.A.; Treadwell, B.V. J. Biol. Chen. 267, 5416-5423, 1992 A; Title: Identification of a novel mammalian annexin. cDNA cloning, sequence analysis, A; Reference number: A42113; MUID:92184796; PMID:1372001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    309 NRVYKTEFKKTLEEAIRSDISGHFQRLLISLSQGNRDESTNVDMTLVQRDVQELYAAGEN 368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAGRQEISAAFKTLFGRDL 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C; Superfamily: annexin VII; annexin repeat homology
C; Keywords: calcium binding; duplication; endonexin fold; glycoprotein;
E; 201-272/Domain: annexin repeat homology <aXI)
E; 212-228/Region: endonexin fold #status predicted
E; 273-344/Domain: annexin repeat homology <aXI>
E; 284-300/Region: endonexin fold #status predicted
E; 356-428/Domain: annexin repeat homology <aXI>
E; 364-384/Region: endonexin fold #status predicted
E; 325-323/Domain: annexin repeat homology <aXI>
E; 343-593/Domain: annexin repeat homology <aXI>
E; 443-459/Region: endonexin fold #status predicted
E; 59,111/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 503;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 84; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      52.8%; Score 865; DB 1; 54.9%; Pred. No. 2.9e-48; Live 58; Mismatches 84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A) introns: 19/1; 56/2
A; Note: the list of introns is incomplete.
  DTSGEYKKALLKLCEGDDD 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GDYRKILLKICGGND 503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 54.99
Matches 173; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: mRNA
A; Residues: 1-503 <TOW>
306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C; Genetics:
윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
```

```
A;Status: preliminary
A;Status: preliminary
A;Status: preliminary
A;Residues: 1-505 <MIS>
A;Residues: 1-505 <MIS>
A;Residues: 1-505 <MIS>
A;Residues: 1-505 <MIS>
A;Cross-references: GB:L19605; NID:g457128; PIDN:AA19734.1; PID:g457129
C;Genetics:
GG:Genetics: GBB:ANX11
A;Cross-references: GBB:313076
A;Map position: 9q11-9g22
C;Superfamily: annexin vII; annexin repeat homology
C;Superfamily: annexin repeat homology <AXI>
F;205-274/Domain: annexin repeat homology <AXI>
F;205-346/Domain: annexin repeat homology <AXI>
F;358-430/Domain: annexin repeat homology <AXI>
F;434-505/Domain: annexin repeat homology <AXI
F;444-505/Domain: annexin repeat homology <AXI
F;444-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      : |||| | : :|| :|| || ::| 371 RLGTDESKFNAVLCSRSRAHLVAVFNEYQRMTGRDIEKSICREMSGDLEEGMLAVVKCLK 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           193 KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              311 NRAYKAEFKKTLEEAIRSDTSGHFORLLISLSQGNRDESTNVDMSLAQRDAQELYAAGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 86:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             52.2%; Score 855; DB 2;
53.3%; Pred. No. 1.3e-47;
tive 61; Mismatches 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        completed: August 22, 2003, 21:36:13
ne : 16 secs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           491 GDYRKILLKICGGND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 168; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Search com
Job time :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: protein
A; Residues: 104-141;213-223, 'X', 225-231;254-263;271-280;285-291, 'X', 293-300, 'X', 302-309;
C; Comment: This protein binds specifically to calcyclin in a Ca2+ dependent manner.
C; Superfamily: annexin VII; annexin repeat homology
C; Keywords: calculum binding; duplication; endonexin fold; glycoprotein; phospholipid bin
F; 201-272/Domain: annexin repeat homology <AXI>
F; 212-228. Region: endonexin fold *status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Molecule type: protein

R; Residues: 104-141;213-231,254-262;270-280;285-309;319-337;429-448;478-492 <TK2>
R; Residues: 104-141;213-231,254-262;270-280;285-309;319-337;429-448;478-492 <TK2>
R; Tokumitsu, H.; Mizuteni, A.; Minami, H.; Kobayashi, R.; Hidaka, H.
J. Biol. Chem. 267, 8919-8924, 1992
J. Filol. Chem. 267, 8919-8924, 1992
A; Title: A calcycylin-associated protein is a newly identified member of the Ca(2+)/phossy A; Reference number: A38250; MUID:92250478; PMID:1533622
A; Accession: A38250
                            C; Accession: JH0694; PH0950; A38250; PS0263
R; Tokumitsu, H.; Mizutani, A.; Muramatsu, M.; Yokota, T.; Arai, K.; Hidaka, H.
Biochem. Biophys. Res. Commun. 186, 1227-1235, 1992
A; Title: Molecular cloning of rabbit CAP-50, a calcyclin-associated annexin protein.
A; Reference number: JH0694; MUID:92378579; PMID:1380798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            369 RLGIDESKFNAVLCSRSRAHLVAVFNEYORMTGRDIEKSICREMSGDLEQGMLAVVKCIK 428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SIPAYLAETLYYAMKGAGTDDHTLIRVMYSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 16-Jun-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Species: Homo sapiens (man)
C;Date: 07-Jul-1995 #sequence_revision 07-Jul-1995 #text_change 13-Aug-1999
                                                                                                                                                                                                                                                        A;Molecule type: mRNA
A;Residues: 1-503 <TOK>
A;Cross-references: DDBJ:D10883; NID:g471147; PIDN:BAA01705.1; PID:g471148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C, Accession: A53152
R; Misaki, Y.; Pruijn, G.J.M.; van der Kemp, A.W.C.M.; van Venrooij, J. Biol. Chem. 269, 4240-4246, 1994
A; Title: The 56K autoantigen is identical to human annexin XI.
A; Reference number: A53152; MUID:94140847; PMID:7508441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              F;273-344/Domain: annexin repeat homology <AX2>
F;284-300/Region: endonexin fold #status predicted
F;356-428/Domain: annexin repeat homology <AX3>
F;368-384/Region: endonexin fold #status predicted
F;3432-503/Domain: annexin repeat homology <AX4>
F;443-503/Domain: annexin repeat homology <AX4>
F;4413-503/Domain: annexin repeat homology <AX4>
F;4413-659/Region: endonexin fold #status predicted
F;58/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 503;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       84; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               52.7%; Score 863; DB 1;
54.3%; Pred. No. 3.9e-48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ||||:| || : | :|
GDYRKILLKICGGND 503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 313 GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best_Local Similarity 54.3%;
Matches 171; Conservative
                                                                                                                                                                                                                                                                                                                                                                                A; Experimental source: lung A; Accession: PH0950
                                                                                                                                                                                                                        A; Accession: JH0694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      annexin XI - human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 15
A53152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               õ
```

252

Gaps

ö

Length 505; Indels THIS PAGE BLANK (USPTO)

```
GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.
```

OM protein . protein search, using sw model

August 22, 2003, 21:28:42; Search time 8.6667 Seconds (without alignments) 1774.354 Million cell updates/sec Run on:

Title: Perfect score: Sequence:

US-09-970-969-4 1639 1 MAGCGHMAQVLRGTVTDFP.....KGDTSGDYKKALLLLSGEDD 327

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

127863 segs, 47026705 residues Searched:

127863 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

SwissProt_41:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Description	P08758 homo sapien	e mus	8 rattus	P17153 gallus gall	5 cynops	Plais nome sapien Plass mus musculu		s sns a	P48037 rattus norv	~	_	canis	P51901 gallus gall	0 rattus		P33477 oryctolagus			mus m	homo	P12429 homo sapien	mus m	P20073 homo sapien	007076 mus musculu	P14669 rattus norv	P79134 bos taurus	P26256 hydra atten	'n	464 drosophi	P07355 homo sapien	
SUMMARIES	ANX5_HUMAN	ANX5_MOUSE	ANX5_RAT	ANX5_CHICK	ANX5_CYNPY	ANX6 MOUSE	ANX4_HUMAN	ANX4_PIG	ANX6_RAT	ANX4_MOUSE	ANX4_BOVIN	ANX4_CANFA	ANX6_CHICK	ANX4_RAT	ANXB_BOVIN	ANXB_RABIT	ANXB_HUMAN	ANXB_MOUSE	ANX8_MOUSE	ANX8_HUMAN	ANX3_HUMAN	ANX3_MOUSE	ANX7_HUMAN	ANX7_MOUSE	ANX3_RAT		ANXC_HYDAT	ANX7_XENLA	ANX9_DROME	ANX2_HUMAN	ANX2_BOVIN
DB	-	٠,	Н	ij		4 ~	-4	Н	٦	7	-	7	-	П	г	7	7	-		Н	Н	-	-	_	-	-	Н	Н	-	-	-
% Query Match Length	319	319	318	321	323	672	318	318	672	318	318	318	671	318	503	503	202	503	327	327	.323	323	466	463	324	618	316	512	2	338	338
	96.7	90.3		78.0	66.3	56.9	56.3		56.2	55.9			54.7	54.4	52.8			51.7	51.3		49.0	٠	47.5	47.4	47.0	•	٠	٠	42.8	42.6	42.4
Score	1585	1479.5	1455.5	1279	1086	932	923	921	921	916	914	901	896.5	891	865	863	855	847	841.5	831.5	0	799	779	777	771	761	718	711	701	698.5	694.5
Result No.	:	ı m	4	S	9 6	~ 60	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27	38	29	30	31	32	33

Q07936 rattus norv P07356 mus musculu	P22465 drosophila P27216 homo sapien	P27006 xenopus lae Q29471 canis famil	P17785 gallus gall P24801 xenopus lae	P51662 oryctolagus P14087 cavia cutle	P04083 homo sapien P46193 bos taurus
ANX2_RAT ANX2_MOUSE	ANXX_DROME ANXD_HUMAN	ANXB_XENLA ANXD_CANFA	ANX2_CHICK ANX2_XENLA	ANX1_RABIT ANX1_CAVCU	ANX1_HUMAN ANX1_BOVIN
				. ط ط	нн
338 338	320 315	339	9 6 6 6 6 6 6	346 346	345 346
42.3	41.8	41.2	40.7	39.7	39.3 39.3
693.5	685.5	675.5	666.5	650.5	644.5 644.5
3.5	36	38 39	40	4 4 3	44 5

ALIGNMENTS

		Iwasaki A., Suda M., Nakao H., Nagoya T., Saino I.,	Iwasaki A Suda M. Nakao H. Nagova T. Saino Y.			RL Biochemistry 26:8087-8092(1987).
		Mizoguchi T., Sato F., Yoshizaki H., Hirata M., Miyata T	Mizoguchi T., Sato F., Yoshizaki H., Hirata M., Miya	SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; Pubmed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai Mizoguchi T., Sato F., Yoshizaki H., Hirata M., Miyata T	LOJ SEGUENCE FROM N.A., AND SEQUENCE. MEDIINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Mizoguchi T., Sato F., Yoshizaki H.; Hirata M., Miya	[5] SEQUENCE FROM N.A., AND SEQUENCE. MEDILINE-88139278; PubMed-2963810; IWASAAI A., Suda M., NAKAO H., NAGOYA T., Saino Y., Mizoguchi T., Sato F., Yoshizaki H., Hirata M., Miya
Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Mizoguchi T., Sato F., Yoshizki H., Hirata M., Miya Chidara V. Mirata M., Mari M.	Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y.,	Treest a Cale M Nation of Treest				
MEDLINE-001392/0; FULMED 2903010; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Sitoguchi T., Sato F., Yoshizaki H.; Hirata M., Miya	MEDLINE-661392/8; Fubmed 2903910; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y.,	MEDLINE=601592/6; PUDMED=2905010;				
MEDILNE-88139278; Pubmed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Mizoguchi T., Sato F., Yoshizki H., Hirata M., Miya	MEDLINE-88139278; Pubmed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y.,	MEDINE-88139278; PubMed-2963810;				
Biochemistry 26:8087-8092(1987). [5] [5] [6] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; Pubmed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Mizoguchi T., Sato F., Yoshizaki H., Hirata M., Miya	Biochemistry 26:8087-8092(1987). [5] [5] [6] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; Pubmed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y.,	Biochemistry 26:8087-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139778; PubMed-2963810;				
"Primary Structure of numan placental anticoaguiant protein. Blochemistry 26:8087-8092(1987). [5] BOCHEMISTRY 26:8087-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278: PubMed-2963810; IWASSKI A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Mizoquchi T., Sato F., Yoshizaki H., Hirata M., Miyata T.,	"Primary Structure of numan placental anticoaguiant protein. Blochemistry 26:8087-8092(1987). [5] EDOTHER FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubWed-2595810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	"Primary structure of numan placental anticoaguiant protein. Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDINE-88139278; Pubbed=2963810;	"Primary structure of numan placental anticoaguiant protein. Biochemistry 26:8087-8092(1987). [5] SEQUENCE PROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	"Primary structure of numan placental anticoaguiant protein. Blochemistry 26:8087-8092(1987).	"Primary structure of human placental anticoagulant protein. Blochemistry 26:8087-8092(1987).	"Primary structure of human placental anticoagulant protein.
"Primary structure of human placental anticoagulant Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDIJNE-88139278; Pubmed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Mizoguchi T., Sato F., Yoshizki H., Hirata M., Miya	"Primary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278: PubMed-2968810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Primary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDINE-88139278; PubBed=2953810;	"Primary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	Primary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987).	"Primary structure of human placental anticoagulant protein. Biochemistry 26.8087-8092(1887).	"Primary structure of human placental anticoagulant protein.
Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] EDON M. A., AND SEQUENCE. MEDLINE-88139278: PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Shidayauchi T., Sato F., Yoshizaki H., Hirata M., Miyata T.,	Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Prinary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] EDCHEMISTRY 26:8087-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubWed-2595810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDIAND-88139278; Pubbed-2953810;	Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; Pubmed-2963810;	Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987).	Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary Structure of human placental anticoagulant protein. Biochemistry 26.8087-8092(1987).	Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.
MEDLINE-88153463: PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein. Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278: PubMed=2965810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Shidayay T., Sato F., Yoshizaki H., Hirata M., Miyata T.,	MEDLINE-88153463: PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein. Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278: PubMed-2965810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed=2963810;	MEDLINE-88153463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fridary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-2965810;	MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987).	<pre>MEDLINE=88163463: PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein. Blochemistry 26.8087-8092(1987).</pre>	<pre>MEDLINE=88163463: PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."</pre>
PEDGINGE FROM N.A. MEDLINE-88163463 PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] EDISHORE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; IWASAKI A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Shidasa V. Muraha M., Nakao H., Nagoya T., Saino Y., Arai K., Shidasa V. Muraha M., Nakao H., Nagoya T., Saino Y., Arai K.,	PEDLINE-888.63463: PubMed-2964863; PURAKOS FINE BERGION N.A. FURAKOS II., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] ENDINCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2965810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	SEQUENCE FROM N.A. MEDLINE-88163463. Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; Pubade-2963810;	SEQUENCE FROM N.A. MEDLINE-88163463. PubMed-2964863; Funakoshi T., Hendrickson L.E., Mowullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., Mowullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2965810;	SEQUENCE REAL OF N. A. MEDLINE-8163, MEDLINE-81634 B. A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987).	<pre>>EQUENCE FROM N.A. MEDLINE-88163463, Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson placental anticoagulant protein. Britchary Structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987).</pre>	SEQUENCE FROM N.A. MEDLINE-8813463; FUNDARIOS T., Fujikawa K.; Fundakoshi T., Fujikawa K.; Frimary structure of human placental anticoagulant protein.
SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein. Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed=2965810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Shiagayihi T., Sato F., Yoshizaki H., Hirata M., Miyata T.,	SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2965810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	SEQUENCE FROM N.A. MEDLINE-881813463; PubMed-2964863; MEDLINE-881813463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fujikawa	SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278 PubMed-2965810;	SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Fundschi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fundary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987).	SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein. Biochemistry 26,8087-8092(1987).	SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujlkawa K.; "Primary structure of human placental anticoagulant protein.
[4] SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88163463: PubMed-2964863; MEDLINE-88163463: PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein. Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Shizaguchi T., Sato F., Yoshizaki H., Hirata M., Miyata T.,	[4] SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88163463: PubMed-2964863; Funakoshi T., Hendrickson L.E., Mokullen B.A., Fujikawa K.; Funakoshi T., Hendrickson I.E., Mokullen B.A., Fujikawa K.; Fufmary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE: MEDLINE-88139278; PubMed-2965810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	[4] SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Forhmary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubBed-2963810;	[4] SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein. Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2965810;	[4] SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987).	[4] SEQUENCE FROM N.A. MEDLINE-88163463: PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein. Biochemistry 26,8087-8092(1987).	[4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.
SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88163463: PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., And SEQUENCE MEDLINE-88139278; PubMed=2963810; IWASAKI A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Shidaya Mizoquchi T., Sato F., Yoshizaki H., Hirata M., Miyata T.,	SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson D.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson D.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson D.E., McMullen B.A., Fujikawa K.; Funakoshi T., Handrickson D.E., McMullen B.A., Fujikawa K.; Funakoshi T., Salmo Y., And Sequence, Medline-88139278 PubMed-296810; Iwasaki A., Suda M., Nakao H., Nagoya T., Salno Y., Arai K.,	[4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-296810;	[4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; FundAcoshi T., Hendrickson L.E., MoMullen B.A., Fujlkawa K.; "Primary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987).	[4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein. Biochemistry 26.8097-8092(1987).	[4] SEQUENCE FROM N.A. MEDILINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., Mowullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.
J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; FundaxOshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein. Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed=2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Shidayahi, T., Sato F., Yoshidasi, H., Hirata M., Miyata T.,	J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein. Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2965810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed=2963810;	J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein. Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88339278; PubMed-296810;	J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."	J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., Mowullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987).	J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463: PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.
Jacobson Street Light	Jacobson March 1100 100 11 (1988). Juston March 1100 100 11 (1988). Juston March 110 100 11 (1988). Sequence Room N.a. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Sepuence Room N.B., Nendro B.A., Fujikawa K.; Sepuence Room N.A., And Sequence MEDLINE-88139278; PubMed-2965810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Jaiotory William 1200 100 100 100 100 100 100 100 100 10	Jacobson Control of the control of t	JOHNSTON WALL INDUCTION 1.0 (1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.	John Loy, W.L. 11900-1011 1. J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frunary Structure of human placental anticoagulant protein.	Inchiology with imposition 1. (4) J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakoshi T., Hendrickson L.E., MoMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson Diacental anticoagulant protein.
homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.B., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.B., McMullen B.A., Fujikawa K.; Funary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1967). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed=2965810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Shiagay T., Sato F., Yoshizaki H., Hirata M., Miyata T.,	homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funaxoshi T., Hendrickson L.B., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein: Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2965810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakcshi T., Hendrickson T., Hendrickson T., Fujikawa K.; Funakcshi T., Hendrickson T., Hendrickson T., Fujikawa K.; Funakcshi T., Hendrickson T., Hendrickso	homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Fundary Structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-296810;	homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Fundary Structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987).	homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463: PubMed-2964863; Funakoshi T., Hendrickson L.E., MoMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987).	homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.
"Five distinct calcium and phospholipid binding proteins sha homology with lipocottin." J. Biol. Chem. 263:10799-10811(1988). J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. Dibber 10.8., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein. Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; Pubbed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Shizaguchi T., Sato F., Yoshizaki H., Hirata M., Miyata T.,	"Five distinct calcium and phospholipid binding proteins sha homology with lipocortin."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. B.	"Five distinct calcium and phospholipid binding proteins sha homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8816346; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1967). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed=2963810;	"Five distinct calcium and phospholipid binding proteins sha homology with lipocortin I.". J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein. Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-296810;	"Five distinct calcium and phospholipid binding proteins sha homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Exclence FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."	"Five distinct calcium and phospholipid binding proteins sha homology with lipocottin."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary Structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987).	"Five distinct calcium and phospholipid binding proteins sha homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.
"Five distinct calcium and phospholipid binding proteins sha homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2944863; Fundary Structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [55] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed=2964810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Shidaya Y., Saco F., Yoshizaki H., Hirata M., Miyata T., Saco F., Yoshizaki H., Hirata M., Miyata T.,	"Five distinct calcium and phospholipid binding proteins sha homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Fundschill, Hendrickson L.E., McMullen B.A., Fujikawa K.; Fundardy structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [55] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2965810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	"Five distinct colling manner for the first distinct colling proteins sha homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Handrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Handrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein. Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	"Five distinct calcium and phospholipid binding proteins sha homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein. Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A. MEDLINE-88139278; PubMed-296810;	"Five distinct calcium and phospholipid binding proteins sha homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.	"Five distinct calcium and phospholipid binding proteins sha homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463: PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein. Biochemistry 26,8087-8092(1987).	"Five distinct colling manner Frive distinct colling proteins sha homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.
Hession C., Frey A.Z., Wal Five distinct calclum and homology with lipocortin J J. Biol. Chem. 263:10799-1 SEQUENCE FROM N.A. MEDLINE-88163463; Pubmed=2 Funakoshi T., Hendrickson "Primary structure of hume Biochemistry 26:8087-8092 [5] SEQUENCE FROM N.A., AND SE SEQUENCE FROM N.A., AND SE SEQUENCE FROM N.A., AND SE MEDLINE-88139278; Pubmed=2 Iwasaki A., Suda M., Nakac Mizgoguchi T., Sato F., Yos Mizgoguchi T., Sato F., Vos	Hesslon C., Frey A.Z., Wal "Five distinct calclum and homology with lipocortin J J. Biol. Chem. 263:10799-18 [4] SEQUENCE FROM N.A. MEDLINE-88163463; Pubmed=2 Funakoshi T., Hendrickson "Primary structure of hume Biochemistry 26:8087-8092 [5] SEQUENCE FROM N.A., AND SE SEQUENCE FROM N.A., AND SE MEDLINE-88139278; Pubmed=2 Iwasaki A., Suda M., Nakac	Hession C., Frey A.Z., Wal "Five distinct calcium and homology with lipocortin J. Blol. Chem. 263:10799-1 [4] SEQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM S.D. Funakoshi T., Hendrickson "Primary structure of hume Blochemistry 26:8087-80928 [5] SEQUENCE FROM N.A., AND SE SEQUENCE FROM N.A., AND SE MEDLINE-88139278; Pubmed-Z.	Hesslon C., Frey A.Z., Wal "Five distinct calclum and homology with lipocortin J J. Biol. Chem. 263:10799-18 [4] SEQUENCE FROM N.A. MEDLINE-88163463; Pubmed=2 Funakoshi T., Hendrickson "Primary structure of hume Biochemistry 26:8087-8092 [5] SEQUENCE FROM N.A., AND SE MEDLINE-88139278; Pubmed=2	Hession C., Frey A.Z., Wal "Five distinct calcium and homology with lipocortin 1 J. Biol. Chem. 263:10799-1 [4] SOUUNCE FROM N.A. MEDLINE-88163463; PubMed-2 Funakoshi T., Hendrickson "Primary structure of hume Biochemistry 26:8087-80927	Hession C., Frey A.Z., Wal "Five distinct calcium and "Five distinct calcium and homology with lipocritin 1 J. Biol. Chem. 263:10799-1 [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2 Funakoshi T., Hendrickson "Frimary structure of hum "primary structure of hum "primary structure of hum	Hession C., Frey A.Z., Wal Five distinct calcium and homology with lipocortin 1 J. Biol. Chem. 263:10799-1 [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2 Funakoshi T., Hendrickson "Primary structure of huma
Hession C. Frey A.Z., Wallession C. Frey A.Z., Wall Five distinct calcium and homology with lipocortin J. Biol. Chem. 263:10799-1 [4] [4] SEQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM N.A. Frinary structure of hume primary structure of hume piochemistry 26:8087-8092([5] SEQUENCE FROM N.A., AND SE MEDLINE-88139278; Pubmed-Zivasaki A., Suda M., Nakae-Zivasaki A., Nakae-Zivasaki A., Suda M., Nakae-Zivasaki A.,	Hession C., Frey A.Z., Wallession C., Frey A.Z., Wall-Five distinct calcium and homology with lipocortin J. Biol. Chem. 263:10799-1 [4] [4] SEQUENCE FROM N.A. SEGUENCE FROM N.A. SEGUENCE FROM N.A. SEGUENCE FROM N.A. SEGUENCE FROM T., Hendrickson Frimary structure of huma piochemistry 26:8087-8092(5) [5] SEGUENCE FROM N.A., AND SE SEGUENCE FROM N.A., AND SE SEGUENCE FROM N.A., AND SE SEGUENCE PROM N.A., AND SE SEGUENCE	Hession C. (Frey A.2., Rallession C. (Frey A.2., Rallession C. (Frey A.2., Rallession C. (Frey A.2.) Rallession C. (Frey A.2.) Rallession Chem. 263:10799-15. REQUENCE FROM N.A. MEDLINE-88163463; Pubmed=2 Frimary structure of hume Biochemistry 26:8087-80924 [5] SEQUENCE FROM N.A., AND SERVEDINE-88139278; Pubmed=2 FROM N.A., AND S	Browning J.L., Chow E.P., Hesslon C., Freey A.Z., Wall "Five distinct calclum and homology with lipocortin J., Biol. Chem. 263:10799-1 [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2 Funakoshi T., Hendrickson "Primary structure of hume Biochemistry 26:8087-8092([5] [5] [5] SEQUENCE FROM N.A., AND SE MEDLINE-88139278; PubMed=2	Browning J.L., Chow E.P., Hesslon C., Frey A.Z., Ral, "Five distinct calcium and homology with lipocortin J. J. Biol. Chem. 263:10799-1 [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2 Fundary structure of humm "Primary structure of humm Biochemistry 26:8087-8092(Browning J.L., Chow E.P., Hession C., Frey A.Z., Wal Five distinct calcium and homology with lipocortin J. J. Biol. Chem. 263:10799-1 [4] SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88163463; PubMede-Z Funakoshi T., Hendrickson "Primary Structure of hume "Primary Structure of hume	Browning J.L., Chow E.P., Hesslon C., Frey A.Z., Ral, Five distinct calcium and homology with lipocortin 1 J. Biol. Chem. 263:10799-1 [4] SEQUENCE FROM N.A. MEDLINE-RESH 88163463; PubMed=2 Funakoshi T., Hendrickson "Primary structure of hume
Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Shidany V., Saino F., Yoshizaki H., Hirata M., Miyata T.,	Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share nomology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8902(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Pubmed-2964863; Fundary Structure of human placental anticoagulant protein."; Primary Structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; Pubmed-2963810; MEDLINE-88139278; Pubmed-2963810;	Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funithary Structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463: PubMed-2964863; Funaxoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987).	Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Frey A.Z., Wallner B.P.; "Five distinct calctium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987).	Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein.";
Pepinsky R.B., Tizard R., Browning J.L., Chow E.P., Hesslon C., Frey A.Z., Wal Frive distinct calcium and homology with lipocortin J., Blol. Chem. 263:10799-1 [4] SeQUENCE FROM N.A. MEDLINE-88163463; Pubmed=2 Funakoshi T., Hendrickson "Primary structure of hume "primary structure of hume "primary structure of hume Biochemistry 26:8087-8092([5] MEDLINE-88139278; Pubmed=Zivasaki A., Suda M. N. A. AND SE MEDLINE-88139278; Pubmed-Zivasaki A., Suda M., Nakaraki A., Suda F., Suda F., Suda F., Suda M., Nakaraki A., Suda M., Naka	Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C.J., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson T., Newaya K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson M. Hendrickson McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson M. Hendrickso	Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE ROM N.A., BubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE PROM N.A., AND SEQUENCE. MEDLINE-8813278; PubMed-2963810; THORDEL PROM N.A., AND SEQUENCE.	Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C.J., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Rive distinct calcium and phospholipid binding proteins share homology with lipocortin I., (1) J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:807-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE MEDINE-881392/8; PubMed-2963810;	Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; bubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987).	Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). \$EQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Prinary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987).	Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin L."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C. Frey A.Z., Wallner B.P.; Broteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakosh T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Shidan M., Nakao H., Nagoya T., Saino Y., Arai K., Shidan M., Nakao H., Hirata M., Miyata T., Shidan M., Nakai M., Hirata M., Miyata T., Shidan M., Nakai M., Hirata M., Miyata T.,	Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Wachter L Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Bol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDIACKSON L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., And SEQUENCE. SEQUENCE FROM N.A., AND SEQUENCE. MEDIINE-88139278; Pubmed-2963810; Funature-88139278; Funature-88139278	Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Handrickson L.E., McMullen B.A., Fujikawa K.;	Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Eve distinct calcium and phospholipid binding proteins share homology with lipocortin I., J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDIMEd-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Finakoshi T.Y. 26:8087-8092(1987).	Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987).	Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Burne C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Bol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDMEd-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browninsy J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Pratt D., Wachter L. Hondlogy with lipocortin I., J. B.D.; Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., And SEQUENCE FROM N.A., AND SEQUENCE FROM N.A., AND SEQUENCE FROM N.A., AND SEQUENCE FROM M., Nakao H., Nagoya T., Saino Y., Arai K., Mizaaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Kalangari M., Andriaki H., Hirata M., Miyata T., Andriaki M., Nakao H., Hirata M., Miyata T., Andriaki M., Nakao H., Hirata M., Miyata T.,	MEDLINE-88273202; PubMed-2968983; Peplinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browninsy J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	MEDLINE-88273202; PubMed-296898; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Encl. Chem. 263:10799-10811(1988). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE PROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; THORINE-88139278; PubMed-2963810;	MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., E., Wallner B.P.; Pratt D., Wachter L. J., Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8802(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	MEDLINE-88273202; PubMed-296898; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C.J., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987).	MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browninsy J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. B.D.; B.D. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Blochemistry 26:8087-8092(1987).	MEDLINE-88273202; PubMed-296898; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
MEDLINE—88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.', J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furimary structure of human placental anticoagulant protein.'; Blochemistry 26:8087-8092(1987). [5] Funakoshi T., And SEQUENCE MEDLINE—8813978; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., And Sequent T., Sato F., Yoshizaki H., Hirata M., Miyata T., And Sequent T., Sato F., Yoshizaki H., Hirata M., Miyata T., And Sequent H., Hirata M., Miyata T., And Sequent T., And Sequent H., Hirata M., Miyata T.,	MEDLINE—88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I.', J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). [5] Eunakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., And Spouror From placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Embard R. A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	MEDLINE-88173202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Prive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., And SEQUENCE. McMullen B.A., Fujikawa K.; Funakoshi T., And SEQUENCE. McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Ferimary Structure of human placental anticoagulant protein."; Ferimary Structure of human placental anticoagulant protein."; Ferimary Sequence FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Funakoshi T. Medline-88139278; Funakoshi T. Medline-88139278; Funakoshi T. Medline-8813	MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I.; J. J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	MEDLINE—88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Browning J.L., Chow B.P., Mallner B.P.; Prive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE—88163465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimakoshi T., Hendrickson L.B., McMullen B.A., Fujikawa K.; Frimakoshi T., Segura G. Pumakoshi T., Hendrickson Diaman placental anticoagulant protein.";	MEDLINE—88273202; PubMed-2968983; MEDLINE—88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Prinary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987).	MEDLINE—88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Prive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE—88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Shidany V., Saino F., Yoshizaki H., Hirata M., Miyata T.,	SEQUENCE FROM N.A. MEDLINE-8873202; PubMed-2968983; MEDLINE-8873202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Browning J.L., Chow E.P., Malliner B.P.; Hession C., Frey A.Z., Walliner B.P.; Tive distinct calcium and phospholipid binding proteins share homology with lipocortin I.', J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8892(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	SEQUENCE FROM N.A. MEDLINE-88273222 PubMed-2968983; MEDLINE-88273222 PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Funakoshi T., McMullen B.A., Fujikawa K.; Frimeriki Seguence FROM N.A., AND SEQUENCE.	SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; PEPLINSKY R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Blochemistry Structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Fiesy A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Fundacyshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fundacy structure of human placental anticoagulant protein."; Finary 26:8087-8092(1987).	SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; PEPPINSKY R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Blochemistry 26:8087-809211987).	SEQUENCE FROM N.A. MEDLINE-8827302; PubMed-2968983; MEDLINE-8827302; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Proteins share phomology with lipocortin I."; D. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fuimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Funakoshi T., And SEQUENCE FROM N.A., AND SEQUENCE FROM N., Nakao H., Nagoya T., Saino Y., Arai K., Mizaski A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Andriaski H., Hirata M., Miyata T., Andriashi Mizaguchi T., Asto F., Yoshizaki H., Hirata M., Miyata T.,	MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattalano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; PEDINSY R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Tive distinct calcium and phospholipid binding proteins share homology with lipocortin T., J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Fundary structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; THEORY PRODUCT A. AND SEQUENCE.	SEQUENCE FROM N.A. MEDLINE-80273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattalano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five district calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Firmary structure of human placental anticoagulant protein."; Biochemistry 26:807-8092(1987). [5] SEQUENCE PROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein.";	SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I., 1988). J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Biochemistry 26:8087-8092(1987).	SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Enol. Chem. 263:10799-10811(1988). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-8813978; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Chisara V. M., Sate E., Yoshizaki H., Hirata M., Miyata T.,	SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Funakoshi T., AND SEQUENCE FROM N.A., AND SEQUENCE FROM N.A., AND SEQUENCE FROM N.A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	SEQUENCE FROM N.A. MEDLINE-88273202; Pubmed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow B.P., Mallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88183463; Pubmed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; Pubmed-2963810; FUDLINE-88139278; Pubmed-2963810; FUDLINE-88	[3] SEQUENCE FROM N.A. MEDIINE-88273202; PubMed-2968983; Mediline-88273202; PubMed-2968983; Mediline B.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I.; J. J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDIINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDIINE-88139278; PubMed-2963810;	SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Prive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Finakoshi T., Hendrickson L.B., McMullen B.A., Fujikawa K.; Finakoshi T., Sendrickson L.B., McMullen B.A., Fujikawa K.; Finakoshi T., Sendrickson L.B., McMullen B.A., Fujikawa K.; Finakoshi T., Bendrickson L.B., McMullen B.A., Fujikawa K.;	[3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Prinary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987).	SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Browning J.L., Chow B.P.; Walner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88232322 PubMed-2968983; REDINE-88232022 PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8992(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Shidany V. Mizayau H., Hirata M., Miyata T.,	SEQUENCE FROM N.A. SEQUENCE 131 SEQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share Five distinct calcium and phospholipid binding proteins share J. Biol. Chem. 263:10799-10811(1988). 44	[3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesskon C., Firey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; FUNDAL PROBRES FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; FUNDAL PROBRES FROM N.A., AND SEQUENCE.	[3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	[3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; PEPRINSKY R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hessbon C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; [4] Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Fundschiller B.A., Fujikawa K.; Fundary structure of human placental anticoagulant protein."; "Frinary structure of human placental anticoagulant protein.";	[3] SEQUENCE FROM N.A. MEDLINE-8812322; DIDMed-2968983; MEDLINE-8812322; PubMed-2968983; MEDLINE-8812322; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distrinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Futanry structure of human placental anticoagulant protein."; Biochemistry 26:8087-80921987).	[3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; PEPLINSKY R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hesskon C., Firey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein.";
Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Promology with lipocortin I., P.P.; Promology with lipocortin I., P.P.; Promology with lipocortin I., Sequence FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., And SEQUENCE FROM N.A., AND SEQUENCE FROM N.A., AND SEQUENCE FROM N.A., AND SEQUENCE FROM N.A., AND SEQUENCE FROM N., Nakao H., Nagoya T., Saino Y., Arai K., Misaaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., K., A., A., A., A., A., A., A., A., A., A	Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8992(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Eur. J. Blochem. 174:585-592(1988). [13] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; THORNEY BIOSENCE FROM N.A., AND SEQUENCE.	Eur. J. Blochem. 174:585-592(1988). [31] SEQUENCE FROM N.A. MEDLINE-8073202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five district calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Firmary structure of human placental anticoagulant protein."; Biochemistry 26:807-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	EUT J. Blochem. 174:585-592(1988). [31] SEQUENCE FROM N.A. MEDLINE-8073202; PubMed-2968983; MEDLINE-8073202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-80163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987).	Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I., P.; J. B.D.; B.D.; Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Blochemistry 26:8087-8092(1987).	Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
Eur. J. Blochem. 174:585-592(1986). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I.', J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein.', Blochemistry 26:8087-8092(1987). [5] Eur. AND SEQUENCE MEDLINE-8813978; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Chisara V. M., Naki M., Nako H., Hirata M., Miyata T., Chisara V. M., Manney H., Hirata M., Miyata T.,	Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I.,; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.;	Eur. J. Blochem. 174:585-592(1986). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963810;	Eur. J. Biochem. 174:585-592(1986). Eur. J. Biochem. 174:585-592(1986). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I.'; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:807-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinakoshi T., Hendrickson L.E.)	Eur. J. Blochem. 174:585-592(1986). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E.)	Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow B.P.; Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] EBURCE FROM N.A. BEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow B.P., Mallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE RROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Handrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE ROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Shidara Y., Manaski A., Suda M., Nakao H., Hirata M., Miyata T., Saing Y., Missi M., Nakai K., Saing Y., Arai K., Saing Y., Saing Y., Saing Y	Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. SEDOINE-88273202. PEDINE-88273202. PEDINE-88273202. PEDINE-88273202. PEDINE-88278. REDLINE-882728. PROMING J.L., Chow E.P., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; FURDLINE-88139278; PubMed-2963810; FU	Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakcshi T., Handrickson L.E., McMullen B.A., Fujikawa K.; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; PEPINSKY R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hessbon C., Fiesy A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Sesure of human placental anticoagulant protein.";	Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88232302; PubMed-2968983; MEDLINE-88232302; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primakoshi T., Biochemistry 26:8087-8092(1987).	Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. BEDLINE-88273202; PubMed-2968983; PEDLINE-88273202; PubMed-2968983; PEDLINE-8827300 C., Tazard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Trey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mathaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frey distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139778; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Mizaguchi T., Sato F., Yoshizaki H., Hirata M., Miyata T.,	Ca2+-dependent phospholipid-binding protein."; [31] [41] [52] [52] [53] [53] [54] [55] [55] [56] [56] [56] [56] [56] [57] [58] [58] [58] [58] [58] [58] [58] [58	Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDILINE-8813202; PubMed-2968983; MEDILINE-8813202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct colcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funaxy structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2968810; FUDDINE-88139278; FUDDINGERERERERERERERERERERERERERERERERERERER	Ca2+-dependent phospholipid-binding protein."; [31] [32] [31] [32] [33] [34] [35] [35] [36] [37] [38] [38] [38] [38] [38] [39] [38] [38] [38] [38] [38] [38] [38] [38	Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDILINE-8813202; PubMed-2968983; MEDILINE-813202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Fundary structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein.";	Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; Pubmed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Prowning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I., J. B.P.; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Futakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Futakoshi T., Hendrickson L.E.)	Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-881232: PubMed-2968983; MEDLINE-881232: PubMed-2968983; Pepinsky R.B.: Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
"CLOINING and expression of Cluba for numan vascular anticoagliant, a CL21-dependent phospholigid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-8813978; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Shidan W., Nakao H., Nitata M., Miyata T., Saing Y., Naci M., Nakao H., Hirata M., Miyata T.,	Ca2+-dependent phospholigid-binding protein."; Ca2+-dependent phospholigid-binding protein."; Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A., BubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.;	"Cloning and expression of Cuba for numan vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Trey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-8813278; PubMed-2963810; THORDELLE-88139278;	"CLOTHING and expression of CLNA for numan vascular anticoagliant, a CL2+-dependent phospholigid-binding protein."; Eur. J. Biochem. 174:585-592(1988). Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:807-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	"CLORING and expression of CLOR for numan vascular anticoagulant, a CLORING and expression of CLOR for numan vascular anticoagulant, a CLORING biotechem. 174:585-592(1988). EUT. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow B.P.; Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Trey distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frunakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frunakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frunakoshi T., Hendrickson L.B., McMullen B.A., Fujikawa K.; Frunakoshi T., Hendrickson T.B., McMullen B.A., Fujikawa K.; Fuji	"CLOTING and expression of club for numan vascular anticoagulant, a CL21-dependent phospholigid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Richary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987).	"Cloning and expression of Cuba for numan vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
"Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] [3] [4] [5] [5] [7] [8] [8] [8] [8] [8] [8] [8] [8] [8] [8	"Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-881273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	"Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [4] Eppinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Wachter L. Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88135465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.B., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.B., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.B., McMullen B.A., Fujikawa K.; Fuinary Structure of human placental anticoagulant protein."; Ferimary Structure of human placental	"Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] [3] MEDINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	"Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [4] Ephinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; [4] From 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Pubmed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Bolbed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Bolbed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Bolbed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.;	"Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). FEDURACE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., S6:8087-8092(1987).	"Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [4] Explines RROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Prive distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fujikawa Y.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fujikawa Y.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fujikawa Y.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fujikawa Y.;
Strawa C., Hauptmann K.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [31] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B., Tizard R., Matthano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139778; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Shidanya V., Nanda B., Nanda H., Hirata M., Miyata T.,	Strawa C., Hauptension K.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattalano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five district calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8992(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	"Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDILINE-8813-3202; PubMed-2968983; Peptinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDILINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Frimary Structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDILINE-88139278; PubMed-2963810; FUDDAL SEQUENCE FROM N.A., AND SEQUENCE.	"Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; MEDLINE-88173202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattalano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five district calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:807-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	"Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDILINE-881231202; PubMed-2968983; PEPTINE-881231202; PubMed-2968983; PEPTINE-881231202; PubMed-2968983; PROWING J.L., Chow E.P., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Matliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Fundary structure of human placental anticoagulant protein."; Primary 26:8087-8092(1987).	Sufface and expression of cDNA for human vascular anticoagulant, a Caloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mathaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E.)	"Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDILINE-881231202; PubMed-2968983; MEDILINE-881231202; PubMed-2968983; Peptinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDICINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139778; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Mizoguchi T., Asto F., Yoshizaki H., Hirata M., Miyata T., Chingara	Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEOUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Fundacshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fundacshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Futmary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2963810; Iwassaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] [8] [8] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B.; Tizard R., Mattalano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funary structure of human placental anticoagulant protein."; Frimary structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; THEATHER-88139278; PubMed-2963810;	Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEOUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; MEDLINE-88273202; PubMed-296898; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Firmary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8802(1987). [5] SEQUENCE PROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholiphid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B.; Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browninsy J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Punakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Prinakoshi T., Hendrickson L.E.) Biochemistry 26:8087-8092(1987).	Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Trey A.Z., Mallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frunakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.;
Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share booking Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] Euchemistry 26:8087-8092(1987). [5] Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Mizata M., Miyata T., Arbert M., Nakoya E., Yoshizaki H., Hirata M., Miyata T., Arbert M., Nakoya E., Mizati M., Miyata T., Arbert M., Nakoya E., Woshizaki H., Hirata M., Miyata T.,	Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, acat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). MEDLINE-88273202; PubMed-296893; MEDLINE-88273202; PubMed-296893; Peppinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Mallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I., T. Figure C., Frey A.Z., Mallner B.P.; Fullol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] Funakoshi T., And SEQUENGE FROM N.A., AND SEQUENGE FROM N.A., AND SEQUENCE FROM N.A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Caloning and expression of cDNA for human vascular anticoagulant, a Cal-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-881273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Murne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Prive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-881363.91 Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [4] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; FUDLINE-88139278; PubMe	Stratowa C., Hauptmann R., Cond. of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8992(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Ca2+-dependent phospholipid-binding protein."; Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [4] Eur. J. Blochem. 174:585-592(1988). [5] Eur. J. Blochem. 174:585-592(1988). [6] Eur. J. Blochem. 172ard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Trey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Boll. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDIJNE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.;	Stratowa C., Hauptmann R., Stratowa C., Hauptmann R., Stratowa C., Hauptmann R., Stratowa C., Hauptmann R., Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I., " [4] Elol. Chem. 263:10799-10811(1988). [5] Elol. Chem. 263:10799-10811(1988). [6] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Pratnakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Biochemistry 26:8087-8092(1987).	Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Caloning and expression of cDNA for human vascular anticoagulant, a Cal-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
Maurer-Fooy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur J. Blochem. 174:585-592(1988). [3] EBROWINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; To Biol. Chem. 253:10799-10811(1988). [4] SEQUENCE RROW N.A. Biolific Continual anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimaty structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE RROW N.A., AND SEQUENCE; MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Naioya T., Saino Y., Arai K., Sato E., Yoshizaki H., Hirata M., Miyata T., A., Sato E., Yoshizaki H., Hirata M., Miyata T., A., Sato E., Yoshizaki H., Hirata M., Miyata T., Sato E., Westi M.	Maurer-Foyy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8813.202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8802(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwassaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Maurer-Fooy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T BEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Fiey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Five distinct Calcium and phospholipid binding proteins share homology with lipocortin I."; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fuinary structure of human placental anticoagulant protein."; Farmark Bilgolis Pepting Pepti	Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Trive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	Maurer-Fooy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hessbon C., Firey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDIGERON L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fulakary structure of human placental anticoagulant protein."; Funakoshi T., Plandrickson L.E., McMullen B.A., Fujikawa K.; Fulakary structure of human placental anticoagulant protein.";	Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distrinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Pratakoshi T., Biochemistry 26:8087-8092(1987).	Maurer-Fooy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Personning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; PubMed-2964863; Funakoshi I., Hendrickoshi L.E., McMullen B.A., Fujikawa K.; Funakoshi I., Hendrickoshi I., Hendrickoshi T., Hendrickoshi T., Hendrickoshi T., Hendrickoshi T., Hendrickoshi T., Hendrickoshi Patimary structure of human placental anticoagulant protein.";
Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullan B.A., Fujikawa K.;	Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Prist C. alcinim and phospholipid binding proteins share homology with lipcortin I."; Paris and Phospholipid binding proteins share homology with lipcortin I."; Sequence FROM N.A. SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Funakcshi T., And SEQUENCE MEDLINE-88139278; PubMed-2963810; Iwassaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a ca2+dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Peptinsky R.B.; Tizard R., Mattalano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipcocrtin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funaxoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963810;	Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Firmary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8892(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a ca2+dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Fundary structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein.";	Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholiphid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEOUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholiphid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Firlary structure of human placental anticoagulant protein."; Primakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primakoshi T., Hendrickson L.E.)	Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8813202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Fundaca2964863; Fundacash T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fundacyshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
MEDLINE-882.1322; PubMed=2455036; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R., Stratowa C., Hauptmann R., "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815345; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-8813978; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Sato E., Yoshizaki H., Hirata M., Miyata T., Chinara M. Miyata T.,	MEDLINE-882.1322; PubMed=2455036; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Enow Structure of human placental anticoagulant protein."; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., And SEQUENCE FROM N.A., And R.A., And R.A., And R.A., And R.A., And R	MEDLINE-882.1322; Bubmed-2435036; MAURIE-882.1322; Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Caloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-881273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-8813635; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [4] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; THEORY PROMESSION PR	MEDLINE-882.1322; PUDMEd=2455036; MAURENE-882.1322; PUDMEd=2455036; Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:807-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-3963810;	MEDLINE-882.1322; PubMed-2455036; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Bunching proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";	MEDLINE-882.1322; PubMed=425036; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peppinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Elol. Chem. 263:10799-10811(1988). Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Prinary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987).	MEDLINE-882.1322; PubMed=2455036; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
MEDLINE-88271329; PubMed-2455636; Maucer-Fooy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcowa C., Hauptmann R., "Cloning and expression of cDNA for human vascular anticoagulant, a cazt-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [4] Exgure BROX N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share J. Biol. Chem. 263:10799-10811(1988). [4] Excuence RROM N.A. Medicalcom L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., And SEQUENCE MEDLINE-8813978; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K.,	MEDLINE-88271329; PubMed-2455636; Maucer-Fooy I., Rauptmann R.; Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow B.P.; Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Eunakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Exadence FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2964863; Iwassaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	MEDLINE-88271329; PubMed-2455636; Mauter-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R., Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] EMEDLINE-88273202; PubMed-2968983; Pephinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Epimenstry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDDLINE-88139278; PubMed-2963810; FUDER-REBISPZ78; PubMed-296	MEDLINE-88271329; PubMed-2455636; Mauter-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUEBNCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	MEDLINE-88271329; PubMed-2455636; Mauter-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R., Stratowa C., Hauptmann R., "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+*dependent phospholipid-binding protein."; Bur. J. Biochem. 174:585-592(1988). [3] [3] [4] [5] [6] [7] [8] [8] [8] [8] [9] [9] [9] [9	MEDLINE-88271329; PubMed-2455636; Maucer-Fooy I., Rauptmann R., Stratcwa C., Hauptmann R., Stratcwa C., Hauptmann R., Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SGUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Browning J.L., Chow B.P., Mallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Biochemistry 26:8087-8092(1987).	MEDLINE-88271329; PubMed-2455636; Mauter-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R., Stratowa C., Hauptmann R., "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] Eur. J. Biochem. 174:585-592(1988). [4] REDLINE-88273202; PubMed-2968983; Pephinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
MEDLINE-88271329; PubMed-2455636; Mauter-Foyy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression R.; Biochem. 174:585-592(1988). [3] ENGLECE FROM N.A. Maltaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Frey A.Z., Wallner B.P.; Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Stocken R. S., Reucken R. S., Rowillen B.A., Fujikawa K.; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McWullen B.A., Fujikawa K.; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Naioya T., Saino Y., Arai K., Mizaaki A., Suda M., Nakao H., Naioya T., Saino Y., Arai K., Saino Y.	MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hautmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8873203; PubMed-2968983; Peptinsky R.B.; Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Timary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8892(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	MEDLINE-88271329; PubMed-2455636; Maurer-Foyy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. Mannan placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Frimary Structure of human placental anticoagulant protein."; "Fired A.S. Manna Placental anticoagulant protein."; "Fired A.S. Manna Placental anticoagulant protein."; "Fired A.S. Manna Placental anticoagulan	MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; MEDLINE-88373202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Biochemistry structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	MEDLINE-88271329; PubMed-2455636; Maurer-Foyy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MALAILAND R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesskon C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163; Fundary structure of human placental anticoagulant protein."; Fundary structure of human placental anticoagulant protein."; Fundary structure of human placental anticoagulant protein.";	MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8873202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Fruakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Fruakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Fruakoshi T., Hendrickson L.E.)	MEDLINE-88271329; PubMed-2455636; Maurer-Foyy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Matliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Boll. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; PubMed-2964863; Funakcshi I., Hendrickshi L., Hendrickshi I., Hendrickshi I., Hendrickshi I., Hendricker I.E., McMullen B.A., Fujikawa K.; Funakcshi T., Hendricker I.E., McMullen B.A., Fujikawa K.; Funakca H. S., Fujikawa K.; Fujikawa K.; Funakca H. S., Fujikawa K.; Funakca H. S., Fujikawa K.; Fujik
SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubbMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a ca2+-dependent phospholiphid-binding protein."; [3] Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; [5] Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholiphid binding proteins share homology with lipocortin I."; J. Baol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] Ewebling-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Mizaguchi T., Sato F., Yoshizaki H., Hirata M., Miyata T., Chilang Mizaguchi T., Hirata M., Miyata T., Chilang Mizaguchi T., Hirata M., Miyata T., Chilang Mizaguchi T., Man Sequenti Mizaguchi T., Chilang Mizaguchi T., Man Sequenti M., Nakao H., Nakao H	SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a ca2+-dependent phospholiphid-binding protein."; [3] Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-8827322; PubMed-296898; MEDLINE-8827322; PubMed-296898; MEDLINE-8827322; PubMed-296898; MEDLINE-8827322; PubMed-296898; MEDLINE-8827322; PubMed-296898; MEDLINE-ROW N.A. MEDLINE-BUBLE Calcium and phospholiphid binding proteins share homology with lipcoortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [7] Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [8] Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [7] Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [8] Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987).	SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MULTINE-88271329; PubbMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; Pepinsky R.B., Tizard R., Matlano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funary structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein."; Epinemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963810;	SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MUDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a ca2+-dependent phospholiphid-binding protein."; [3] [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mathaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burner C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frey distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Blochemistry 26:807-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MULTINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; MEDLINE-8373202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholiphid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Propinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Baol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frianty Structure of human placental anticoagulant protein."; Blochemistry 26:8087-80921087).	SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MULTINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8813202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-881634; PubMed-2964863; Fundschaft Structure of human placental anticoagulant protein.";
SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245636; MAURE-871329; PubMed-245636; MAURE-ROY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Fry A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Funakoshi T., And SEQUENCE. MEDLINE-8813978; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Philogouch T., Sato F., Yoshizaki H., Hirata M., Miyata T., "Prince P. Yoshizaki H., Hirata M., Miyata T.,	SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88171329; PubMed-245636; MAURE-ROYJ I., Reutelpagerger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245636; MAUTET-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). KEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-8813278; PubMed-2963810; THEAST C. A.	SEQUENCE FROM N.A., AND PARTIAL, SEQUENCE. MEDLINE-88271329; PubMed-245636; MAURE-FORY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; CDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Trive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8817-892(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-8833278; PubMed-2963810;	SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Fundary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245636; MAURE-FORY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092.1087).	SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
PEDUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratcowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a But. J. Blochem. 174:585-592(1988). Eur. J. Blochem. 174:585-592(1988). Browning J.L., Chow E.P., Murne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", "Five distinct calcium and phospholipid binding proteins share bomology with lipocortin I.", "Five distinct calcium and phospholipid binding proteins share septimacy structure of human placental anticoagulant protein."; [4] Eul. Chem. 263:10799-10811(1988). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-8813278; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Phisaguchi T., Sato F., Yoshizaki H., Hirata M., Miyata T., Phisaguchi T., Sato F., Yoshizaki H., Hirata M., Miyata T.,	PEDUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-745536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratcow C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human vascular anticoagulant, Bur. J. Blochem. 174:585-592(1988). MEDLINE-88373202; PubMed-2964883; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] Eul. Chem. 263:10799-10811(1988). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein.", Biochemistry 26:8087-8092(1987). [5] Ewsenke RROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2964861; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	PEDUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; Pubbed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273222; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Residon C., Frey A.Z., Wallner B.A., Fujikawa K.; J. Boll. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813978; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Theory MEDLINE Theory M	PEDGIENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; True distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	MEDLINE-88271329; Pubbed-7455636; MAURE-871329; Pubbed-7455636; MAURE-ROW I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcow C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [4] Facource FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Boll. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Fundary structure of human placental anticoagulant protein."; Frinary structure of human placental anticoagulant protein.";	PEDGIENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-745536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratcow C., Hauptmann R.; Stratcow C., Hauptmann R.; Cal-dependent phospholipid-binding protein."; Cal-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). FEURANCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., 26.8087-8092-11987).	PEDGUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; Pubbed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, "Cloning and expression of cDNA for human vascular anticoagulant, "Cloning and expression of cDNA for human vascular anticoagulant, "Cloning and expression of cDNA for human vascular anticoagulant, [3] Eur. J. Blochem. 174:585-592(1988). [4] MEDLINE-8827322; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Trey A.Z., Wallner B.P.; Pratt D., Wachter L Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Boll. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
[2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAUTEA-FORY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein.", [3] SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-8827322; PubMed-296898; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Handrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Phisara Mizoguchi T., Sato F., Yoshizaki H., Hirata M., Miyata T., Phisara Mizoguchi T., Sato F., Yoshizaki H., Hirata M., Miyata T.,	[2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8873202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Matlaner B.P.; "Five district calcium and phospholipid binding proteins share homology with ilpocortin I."; "Five district calcium and phospholipid binding proteins share homology with ilpocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	[2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesskon C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Fundary structure of human placental anticoagulant protein."; "Primary Structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; T.D. T.D. T.D. T.D. T.D. T.D. T.D. T.D.	[2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8837302; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "I've distrinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Trimary structure of human placental anticoagulant protein."; Blochemistry 26:807-8092(1987). [55] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2263810;	[2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163465; PubMed-2964863; Fundary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	[2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Fribary Structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092(1987).	[2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; PEDINSKY R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
EQUENCE FROM N.A., AND PARTIAL SEQUENCE. SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; [3] Eur. J. Blochem. 174:585-592(1988). [4] MEDLINE-88273202; PubMed-296893; Peplinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Ewaski A., Suda M., Nan SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Mizaguchi T., Sato F., Yoshizaki H., Hirata M., Miyata T., Chinan P. Sato F., Yoshizaki H., Hirata M., Miyata T.,	EQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a ca2+-dependent phospholiphid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; MEDLINE-88273202; PubMed-296898; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholiphid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; #Frimary structure of human placental anticoagulant protein."; ##Frimary structure of human placental anticoagulant protein.";	SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [31] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattalano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Fundary structure of human placental anticoagulant protein."; "Frimary structure of human placental anticoagulant protein."; "Frimary structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; THORDAL PRESSURE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; THORDAL PRESSURE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; THORDAL PRESSURE FROM N.A., AND SEQUENCE.	EQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a ca2+-dependent phospholiphid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; MEDLINE-BALTIC Calculum and phospholiphid binding proteins share homology with lipocortin I."; Browning J.L., Chow E.P.; Burne C., Haang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calculum and phospholiphid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Trimary structure of human placental anticoagulant protein."; Biochemistry 26:88167-8892(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	22JENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-7455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a ca2+dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [31] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	[2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Fritamry Structure of human placental anticoagulant protein."; Hochemistry 26:8087-809211987.	22JENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8813202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Fundschift I., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
FIGURE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245636; MAULENE-88271329; PubMed-245636; MAULENE-88271329; PubMed-245636; MAURENT-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Tiol. Chem. 263:10799-10811(1988). [4] Elol. Chem. 263:10799-10811(1988). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Funakoshi A., Suda M., Nanb SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Andreas M., Nakata T., Andreas M., Nakata T., Andreas M., Nakata T., Andreas M., Nakata T., Andreas M., Nakata H., Hirata M., Miyata T., Andreas M., Nakata	FIGURE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245636; MAULENE-88271329; PubMed-245636; MAUTENE-88271329; PubMed-245636; MAUTENE-88271329; PubMed-245636; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8992(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE: MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	[2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245636; MAURIE-REATI329; PubMed-245636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow B.P., Wallner B.P.; Pratt D., Wachter L. Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakosh T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Brichemistry 26:8087-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; MEDLINE-88139278;	FIGU. Matt. Acad. SCI. U.S.A. 83:3706-3712(1398). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245636; MAURET-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid.binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Blochemistry 26:801789-8022(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	FIGU. Natl. Acad. SCI. U.S.A. 83:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Hang KS., Pratt D., Wachter L. Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Boll. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; PubMed-2964863; Fundary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	FIGU. Natl. Acad. SCI. U.S.A. 83:3706-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245636; MAURET-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Prinakoshi T., Hendrickson L.E.)	FIGU. Matl. Acad. SCI. U.S.A. 83:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-881273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
PIOC. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; Pubbed-7455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcowa C., Hauptmann R.; Cloning and expression of CDNA for human vascular anticoagulant, a Cal-4dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8873202; Pubmed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blochem 253:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Pubmed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; Pubmed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Phisara Mizaguchi T., Sato F., Yoshizaki H., Hirata M., Miyata T., Phisara Mizaguchi T., Sato F., Yoshizaki H., Hirata M., Miyata T.,	Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratcowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human vascular anticoagulant, a Bur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8813780. [4] SEQUENCE FROM R.P., Mathlane B.P.; Prive distinct calcium and phospholipid binding proteins share homology with lipocortin I.', "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.', "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.', "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.', "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.', [4] SEQUENCE FROM N.A. MEDLINE-8815478: PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Ewsentel A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fooy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; [3] Usur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; [5] Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.D.; Wachter L. Hession C., Frey A.Z., Wallner B.D.; And phospholipid binding proteins share homology with lipocortin I."; [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; [6] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; [7] MEDLINE-88139278; PubMed-2963810; [8] MEDLINE-88139278; PubMed	Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, "Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:881637-892(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; Pubbled-2455636; Maurer-Fooy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; [3] Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [4] Feptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Pubmed-2964863; Fundary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; PubMed-745536; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcowa C., Hauptmann R., "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8873202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Prinakoshi T., Hendrickson L.E., McMullan anticoagulant protein."; Hochemistry 26:8087-8092.1087).	Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fooy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R., "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human protein.", [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fopy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; [3] Eur. J. Biochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273222; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcum and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 253:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Chigara, V., Sato F., Yoshizaki H., Hirata M., Miyata T., Chigara, V., Mannar M., Nakai M., Hirata M., Miyata T.,	Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human protein."; [3] SEQUENCE FROM N.A. MEDLINE-88163463: PubMed-2964863; Funder of control of control of human placental anticoagulant protein."; [4] SEQUENCE FROM N.A. MEDLINE-88163463: PubMed-2964863; Fundakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-3963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessboot C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Frimary Structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; "MEDLINE-88139278; PubMed-2963810; "MEDLINE-88139278; PubMed-2963810; "MEDLINE-88139278; PubMed-2963810;	Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAUTET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattalano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8817-892(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frinary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987).	Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [3] Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesskon C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with libocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
procein (PF4): nomology with the ilpocortin ramily:; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EMEDINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+'dependent phospholipid-binding protein."; [3] SEOUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; Pephinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8078789; PubMed-2963810; [5] Funakoshi T., And SEQUENCE MEDLINE-88139778; PubMed-2963810; [6] Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Mizaguchi T., Sato F., Yoshizaki H., Hirata M., Miyata T., Chigara	procein (P44): nomology with the ilpocortin ramily:; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EMEDINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholiphid-binding protein."; [3] Eur. J. Biochem. 174:585-592(1988). [4] MEDLINE-8827322; PubMed-296898; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholiphid binding proteins share homology with lipocortin I."; Denolistic calcium and phospholiphid binding proteins share homology with lipocortin I."; SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Funakcshi A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	procein (PF4): nomology with the ilpocortin ramily:; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REQUENCE FROM N.A., AND PARTILL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; [3] Buchmen 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-8817322; PubMed-2968983; Peptinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; "Thorold T. A. AND SEQUENCE."	procein (P44): nomology with the ilpocortin ramily.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EQUENCE FROM N.A., AND PARTILL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; [3] Biochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frie distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8802(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-8813928; PubMed-2963810;	procein (PP4): nomology with the ilpocortin ramily:; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REQUENCE FROM N.A., AND PARTILL SEQUENCE. REDGINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8813202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Tive distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funaxy structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	procein (PP4): nomology with the ilpocortin ramily.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EMEDINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEOUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Futanary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987).	procein (PF4): nomology with the ilpocortin ramily.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REQUENCE FROM N.A., AND PARTILL SEQUENCE. REDGINE-88271339; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a BEQUENCE FROM N.A. MEDLINE-8813202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] Funakoshi A., Suda M., Nanb SEQUENCE. MEDLINE-8813978; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Andrea B., Andrea M., Nakao H., Nakadi A., Suda M., Nakao H., Nakadi A., Suda M., Nakao H., Naiva M., Miyata T., Andrea B., Mizaguchi T., Hirata M., Miyata T., Andrea B., Mizaguchi T., Hirata M., Miyata T., Andrea B.	protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, as Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Fryte distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8078092(1987). [5] Exaguence FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwassaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88171329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stracowa C., Hauptmann R.; Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; MEDLINE-88139278; Pub	protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of chana vascular anticoagulant, a cat-dependent phospholipid.binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:807-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; pubMed-245536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cal-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Land R.S., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; J. Burne C., Huang KS., Pratt D., Wachter L. Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Boll. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Fundacher L.E., McMullen B.A., Fujikawa K.; Fundachenistry 26:8087-8092(1987).	protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann N.; "Cloning and expression of CDNA for human vascular anticoagulant, as Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peppinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primakoshi T., Hendrickson L.E.)	protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88171329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2t-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R. "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2t-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Eunakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-8813278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Ander M., Nakao H., Hirata M., Miyata T., Ander B. V. Mission Y., Arai K., Ander B. V., Ander M., Nakao H., Nagoya T., Saino Y., Arai K., Ander B. V., Ander M., Nakao H., Nakaowa H., Najoya T., Saino Y., Arai K., Ander M., Nakao H., Najoya T., Saino Y., Ander M., Nakao H., Najoya T., Saino Y., Arai K., Ander M., Nakao H., Najoya T., Saino Y., Arai K., Ander M., Nakao H., Najoya T., Saino Y., Arai K., Ander M., Nakao H., Najoya T., Saino Y., Ander M., Nakao H., Nakao	protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8873202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I.'; J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Blochemistry 26:8007-8092(1987). [5] Funakoshi T., And SEQUENCE REDER MEDLINE-88139278; PubMed-2964863; REDINE-88139278; PubMed-2963810; Iwassaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauter-Fooy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; [3] Eur. J. Biochem. 174:585-592(1988). [3] Eur. J. Biochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Burne C., Frey B.P.; Fubmed-2964863; Funary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [4] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; Pubmed-2963810; Biochemistry 26:8087-8092(1983).	protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; pubmed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R. Ca2+dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; Pubmed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; Pubmed-2964863; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:807-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; Pubmed-2963810;	protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauter-Fooy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] Eur. J. Biochem. 174:585-592(1988). [3] Eur. J. Biochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Fundach Structure of human placental anticoagulant protein."; Frimacychi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fundacyshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.;	protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; PubMed-245536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R. "Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8873202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Biochemistry 26:8087-8092.1087).	protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauer-Fooy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8827322; PubMed-2968983; Pephinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Boll. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
Protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOOY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R., "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mathler B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow B.P.; Marne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Stocker D. Hession C., Frey A.Z., Wallner B.P.; Stocker D., Biol. Chem. 253:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153453; PubMed-2964863; Funakoshi T., Handrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Naioya T., Saino Y., Arai K., Andasaki A., Suda M., Nakoo H., Nakoya T., Saino Y., Arai K., Andasaki A., Suda M., Nako H., Hirata M., Miyata T., Chingara W. Miyata T., Andara M., Naka H., Hirata M., Miyata T., Andara M., Naka H., Hirata M., Miyata T., Andara M., Naka M., Naka H., Hirata M., Miyata T., Andara M., Naka	Protein (PP4): homology with the lipocentin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EDUCEN Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [3] EDUCENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauter-Fooy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; EUT. J. Blochem. 174:585-592(1988). [3] EUT. J. Blochem. 174:585-592(1988). [4] ENDINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Trey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; [4] ELOSTORE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] ENDINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FORY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Frimary Structure of humbed-2964863; Funakoshi T., Hendrickson L.E., McDuller-88139278; PubMed-2963810;	Transacterization or cura encoarag numan parcental anticoaguiant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B.; Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Tive distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	Protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FORY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Firadary structure of human placental anticoagulant protein."; "Frinary 26:8087-8092(1987).	Turbracerization or cunA encoang minan parcental anticoaguiant protein (PP14): homology with the lipocortin family."; protein (PP14): homology with the lipocortin family."; protein (PP14): homology with the lipocortin family."; protein acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271322; pubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Matlner G., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Depting Proteins share homology with lipocortin I."; SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fujikawa K	Transacterization of cuna encoang minan parcental anticoaguiant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesskon C., Frey A.Z., Walliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
"Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein 261. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-7455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratchae C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Peplinsky R.B. [4] Frive distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; Datol. Chem. 263:10799-10811(1988). [5] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Sato B. PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Mizaguchi T., Asto E., Yoshizaki H., Hirata M., Miyata T., Andrea E., McMullan M., Nakao H., Nagoya T., Saino Y., Arai K., Andrea E., McMullan M., Nakao H., Nakao H., Hirata M., Miyata T., Andrea E., McMullan M., Nakao H., Nakao H., Hirata M., Miyata T., Andrea E., McMullan M., Nakao H., Mizaguchi T., Hirata M., Miyata T., Andrea M., Nakao H., Nakao H., Hirata M., Miyata T., Andrea M., Miyata T., Andrea M., Miyata T., Andrea M., Miyata M., Miyata T., Andrea M	"Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein 261. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [2] Eur. J. Blochem. 174:585-592(1988). [8] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Pepinsky R.B. Tizard R., Mallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Finany structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [6] Funasski A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	"Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein 261. U.S.A. 83:7308-372(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAUTET-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratoma C., Hauptmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-8813202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Fundarch Structure of human placental anticoagulant protein."; Primary Structure of human placental anticoagulant protein."; Frimary Structure of human placental anticoagulant protein."; Frimary Structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; FURDER-88139278; FURDER-	"Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein aci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; [3] BLOCHEM. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five district calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:807-8092(1987). [55] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	"Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 83:7308-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAUTET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-8813202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Fundary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Primary 26:8087-8092(1987).	"Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Prizard R., Dubmed-296898]. "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Denology with lipocortin I."; Seguence FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen and placental anticoagulant protein."; Blochemistry 26:8087-8092(1987).	"Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 83:7308-7312(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAUTET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
"Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURE-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Forder C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Forder C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Forder C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Forder C.P.M., Mattaliano R.J., Sinclair L.K., Miller G.T. Burn. J. Biochem. 174:585-592(1988). MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T. Browning J.L., Chow E.P., Burne C., Heaston C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] EMBDLINE-8813978; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Mizael M., Nakao H., Nagoya T., Saino Y., Arai K., Mizael M., Nakao H., Nakai M., Miyata T., Arai K., Mizael M., Nakao H., Nakai M., Miyata T., Arai K., Mizael M., Nakao H., Nakai M., Hirata M., Miyata T., Arai K., Mizael M., Nakao H., Nakai M., Miyata T., Arai K., Mizael M., Nakao H., Nakai M., Miyata T., Arai K., Mizael M., Nakao H., Nakai M., Miyata T., Arai K., Mizael M., Nakao H., Nakai M., Miyata T., Mizael M., Nakao H., Nakao H., Nakao H., Nakao H., Nakao H., Nakai M., Miyata T., Mizael M., Nakao H., Naka	"Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Teutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Teutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Teloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Fre distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. Mallactickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Funakoshi A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	"Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENCO. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENCO. Mauptmann R.; Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; "Cloning and expression C. P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Tive distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funaxy structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; MEDLINE-88139278; PubMed-2964863; MEDLINE-88139278; PubMed-2964863; MEDLINE-88139278; PubMed-2964863; MEDLINE-88139278; PubMed-2964863; PRIMARY 26:8087-8092(1987).	"Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REDIENCE FROM N.A., AND PARTIAL SEQUENCE. MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8892(1987). [5] SEQUENCE FROM N.A. MEDLINE-8818328; PubMed-2963810;	"Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENCO. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENCO. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EMEDLINE-882713.9; PubMed-4455636; Maurer-Fody I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Tive distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	"Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURE-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid.binding protein."; Eur. J. Biochem. 174:585-592(1988). Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Hang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson P. P. McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson P. P. McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakos M. P. P. B. P. McMullen B.A., Fujikawa K.; Prinakos M. P. P. B.	"Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EDGENCE FROM N.A., AND PARTILL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; [3] EDGENCE FROM N.A. MEDLINE-8813202; PubMed-2968983; [4] SEQUENCE FROM N.A. MEDLINE-8813202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
Number H: Number	Number H: Number	Number H: "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Nachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Frucke distinct calcium and phospholipid binding proteins share homology with lipocortin I."; SEQUENCE FROM N.A. MEDLINE-88132465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; MEDL	Number H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDILINE-88271329; PubMed-245536; MAURIENE-88271329; PubMed-245536; MAURIENE-88271329; PubMed-245536; MAURIENE-88271329; PubMed-245636; MAURIEN-FOOTH N.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8802(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	Number H: "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-8827322; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.;	Auguper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDILNE-88271329; PubMed-245536; Mancer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDILNE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Prinary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092(1987).	Number H: "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329: PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Trey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Wachter L. Hession C., Trey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Nachter L. Hession C., Erey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Nachter L. Hession C., End Medling proteins share homology with lipocortin I."; SEQUENCE FROM N.A. MEDLINE-88183463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EDFOC. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauter-Fooy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; EUT. J. Blochem. 174:585-592(1988). [3] EDI. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163483; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimaty structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-8813278; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Anders Mizoguchi T., Manaski A., Suda M., Nakoo H., Nakoya T., Saino Y., Arai K., Anders Mizoguchi T., Manasaki H., Hirata M., Miyata T., Anders M., Nako H., Nako H., Hirata M., Miyata T., Anders M., Nako H., Nakoya T., Saino Y., Anders M., Nakoya T., Saino Y., A	Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EDUCORN N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauter-Fooy I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; EUr. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Ellion Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Ewen N.A., AND SEQUENCE ROM N.A., Suda M., Nakao H., Nasao H., Saino Y., Arai K., Russaki A., Suda M., Nakao H., Nasao H., Saino Y., Arai K.,	Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FORY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Huuptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; "Frimary Structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; PERIMATY Structure of human placental anticoagulant protein."; [6] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; PERIMATY STRUCTURE OF Human placental anticoagulant protein.";	Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88131202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Tive distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8817-8992(1987). [55] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FORY I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Huuptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessbon C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.;	Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; protein (PP4): homology with the lipocortin family."; [2] Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauter-Fooy I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mataliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Mataliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Mataline B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092.1087).	Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FORY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. US.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; EUT. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8827322; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang RS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang RS., Fujikawa K.; Funakoshi T., Handrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Handrickson L.E., McMullen B.A., Fujikawa K.; Furimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE: MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Misasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Misasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Misaguchi T., Arai K., Misaguchi T., Hirata M., Miyata T., Misaguchi T.,	Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [8] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Matlner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Pepinsky R.B. Tizard R., Mallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A. MEDLINE-88159278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PPA): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8827302; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Frimary 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963810; [6] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattalano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five district calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8802(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PPJ): homology with the lipocortin family."; Protein (PPJ): homology with the lipocortin family."; Protein Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Primary 26:8087-8092(1987).	Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Matliner B.P.; Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E.)	Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrick of human placental anticoagulant protein.";
Verper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; [2] Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EMEDLINE-88271329; PubMed-2455636; Maurer-Fogy I.; Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [3] Eur. J. Biochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; [5] Pephinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Ewaski A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Mizaaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Mizaaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Mizayauchi T., Mizayau H., Hirata M., Miyata T., Minakon E. Workliazaki H., Hirata M., Miyata T., Miller B. W., Miyata T., Miller B. W., Miyata M., Nakao H., Na	Verper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; [2] Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGLINE-88271329; PubMed-2455636; Maurer-Fody I.; Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholiphid-binding protein."; [3] Eur. J. Biochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-8827322; PubMed-296898; MEDLINE-8827322; PubMed-296898; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholiphid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholiphid binding proteins share homology with lipocortin I."; SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwassaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8813222; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; "Frinary Structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963810;	Verper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3788-3712(1988). [2] EDG. Natl. Acad. Sci. U.S.A. 85:3788-3712(1988). [3] EDG. Natl. Acad. Sci. U.S.A. 85:3788-3712(1988). [4] MAURE-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a cat-dependent phospholiphid-binding protein."; EDG. J. Blochem. 174:585-592(1988). [5] [5] EDG. MEDLINE-8273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mather E., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Pepinsky R.B. Tizard R., Mather B.P.; Pepinsky R.B. Tizard R., Mather B.P.; Pepinsky R.B. Tizard R., Mather B.P.; [4] FINE distinct calcium and phospholiphid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:88163463; PubMed-2963810; SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-8813928; PubMed-2963810;	Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8817322; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	Verper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENCO. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENCO. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENCO. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [3] MAUREN-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; [2] Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein.*; [3] EUI J. Biochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.*; [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.;	Granden U., Aug. N. J., Bolin B., December B., Collegeron F., Ruepper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. MEDLINE-88123202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815465; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelch F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] FERMARCH FROM N.A., AND SEQUENCE. MEDLINE-8813978; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Chisara, V. M., Sada M., Nakao H., Hirata M., Miyata T., Chisara, V. M., Nakado H., Nagoya T., Saino Y., Arai K., Chisara, V. M., Nakado H., Nagoya T., Saino Y., Arai K., Chisara, V. M., Nakado H., Nakado H., Hirata M., Miyata T., Chisara, V. M., Nakado H., Nakado H.	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelch F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURE-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwassaki A., Suda M., Nakao H.,	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelch F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGLE FROM N.A., AND PARTILLS EQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fody I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattalano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funaxy structure of human placental anticoagulant protein."; "Frimary structure of human placental anticoagulant protein."; Frimary structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; PERMEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2964863; MEDLINE-88139278; PubMed-2963810; MEDLINE-8813927	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelch F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Pubmed C., Huang E.O., Machiner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Datol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8802(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelch F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGLE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fody I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [2] Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelch F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid.binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092(1987).	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelch F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGLE FROM N.A., AND PARTILL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; [3] Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Fundacy Structure of human placental anticoagulant protein."; "Frimary structure of human placental anticoagulant protein.";
Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kueupper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MADLINE-88271329; PubMed-245536; MAURIED-18271329; PubMed-245536; MAURIED-1827320; PubMed-245636; MAURIED-1827320; PubMed-296898. "Cloning and expression of cDNA for human vascular anticoagulant, as Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:385-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessaton C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Funakoshi T., Sato F., Noshizaki H., Hirata M., Miyata T., Annakoshi Z., Noshizaki H., Hirata M., Miyata T., Annakoshi Z., Noshizaki H., Hirata M., Miyata T.,	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, as Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peppinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Hanng KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Fryte distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8992(1987). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8992(1987). [5] Funakoshi A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; Pubmed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Sinclair L.K., Miller G.T Frow elstinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; MEDLINE-88139278;	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245636; MAURET-FCGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, as Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8802(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329: PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-8827322; PubMed-296893; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Machter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang proteins share homology with lipocortin I."; J. Boll. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen S.A., Fujikawa K.; Fulangy Structure of human placental anticoagulant protein."; "Primary Structure of human placental anticoagulant protein.";	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDILINE-88271329; PubMed-245636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann N.; "Cloning and expression of CDNA for human vascular anticoagulant, as Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDILINE-88273202; PubMed-296893; Peppinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDILINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein.";	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 83:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; Pubmed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cazt-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; Pubmed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Trey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88183465; Pubmed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuendmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Ruenger H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; pubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R. "Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-296893; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] Eunakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-8813278; PubMed-2963810; Iwasaki A., Suda M., Nakso H., Nasoya T., Saino Y., Arai K., Misaaki A., Suda M., Nakso H., Nairaki H., Hirata M., Miyata T., Ribert M., Nakso H., Nasoya T., Saino Y., Arai K., Ribert M., Suda M., Nakso H., Nasoya T., Saino Y., Arai K., Ribert M., Naksoya E., Yoshizaki H., Hirata M., Miyata T., Ribert M., Nakso H., Nasoya T., Saino Y., Arai K., Ribert M., Naksoya E., Nasi V., Hirata M., Miyata T., Ribert M., Naksoya E., Nasi K., Ribert M., Naksoya H., Nasoya H., Hirata M., Miyata T., Ribert M., Naksoya E., Nasi K., Ribert M., Naksoya H., Nasoya H., Nasi K., Ribert M., Naksoya H., Nasi K., Ri	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuendmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Ruengber H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88171329; pubmed-245536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88173202; Pubmed-296893; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Hurne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I., SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-8815485; Pubmed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] Funakoshi T., And SEQUENCE. SEQUENCE FROM N.A., AND SEQUENCE. SEQUENCE FROM N.A., AND SEQUENCE. SEQUENCE FROM N.A., Nan SEQUENCE. MEDLINE-88139278; Pubmed-2964863; Iwasski A., Suda M., Nakao H., Nasoya T., Saino Y., Arai K.,	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauer-Fooy I., Rautelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] Uratowa C., Hauptmann R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.D., SEQUENCE FROM N.A. "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863;	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-245536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pephinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Frimary structure of human placental anticoagulant protein."; Brimary structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8817-882-88163-8818-8818-8818-8818-8818-8818-881	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauter-Fooy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa S.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa S.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa S.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa Functure of human placental anticoagulant protein.";	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuengher H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88171329; pubmed-245536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88173120; Pubmed-296893; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Hurne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). REDUINE-88163463; Pubmed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Protein T. Brochemistry 26:8087-8092(1987).	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauer-Fooy I., Rautelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R., "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] Uratowa C., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Nachter L Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Nachter L Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Nachter L Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang Proteins share homology with lipocortin I."; J. Boll. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Handrickson L.E., McMullen B.A., Fujikawa K.; Fulakary structure of human placental anticoagulant protein.";
Grundman U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; [2] Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Foyy I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; [4] Eur. J. Blochem. 263:10799-10811(1988). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimakoshi T., Sato F., Woshizaki H., Hirata M., Miyata T., Mizoguchi H., Sada M., Nakao H., Nagoya T., Saino Y., Arai K., Mizoguchi H., Sado E., Yoshizaki H., Hirata M., Miyata T., Engels R. Mizoguchi H., Mirata M., Mixata M., Miyata T.,	Grundman U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EDOTENTE SEQUENCE. REDLINE-8271329; PubMed-2455636; MAURE-FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; PubMed-2455636; MAURE-FROM N.A., AND PARTIAL SEQUENCE. Cal-dependent phospholipid-binding protein.; Cal-dependent phospholipid-binding protein.; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8817320; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Resoluce FROM N.A. MEDLINE-88153202; PubMed-296889; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T RESOLUCE FROM N.A. MEDLINE-88153405; PubMed-296889; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein.; Biochemistry 26:8087-8092(1987). [5] ENDERINE-8815378; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein.; Biochemistry 26:8087-8092(1987). [5] MEDLINE-8813978; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Grundman U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA monoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FORY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Fery A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary Structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963810;	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein.; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8873202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I.; Funday Sequence FROM N.A. MEDLINE-88163463; PubMed-2964863; Frimary structure of human placental anticoagulant protein.; Frimary structure of human placental anticoagulant protein.	Grundman U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kupeper H.; "Characterization of cDNA monology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EDOCENT BROWN A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FORY I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] EBDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessbon C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Primary 26:8087-8092(1987).	Grundman U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; Pubmed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Matlaniano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Matlaliano R.J., Sinclair L.K., Maller G.T Browning J.L., Chow B.P., Matlaliano R.J., Sinclair L.K., Maller B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). REDUINE-88163463; Pubmed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Prinary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987).	Grundman U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kupeper H.; "Characterization of cDNa encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; Mauter-Froyl I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
MEDLINE-88214495; FUDNEG=2297495; Kuepper H.; Kuepper H.; Kuepper H.; Kuepper H.; Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAULET-FROM J.; Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] EMCDINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcum and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 253:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815345; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakso H., Nagoya T., Saino Y., Arai K., Albert Mizaguchi T., Manaski A., Sada M., Nakso H., Hirata M., Miyata T., Arbert M., Nakso H., Naksoya T., Saino Y., Arai K., Albert M., Nakso H., Naksoya T., Saino Y., Arai K., Albert M., Naksoya H., Hirata M., Miyata T., Albert M., Nakso H., Naksoya H., Hirata M., Miyata T., Albert M., Naksoya H., Hirata M., Miyata T., Albert M., Naksoya H., Hirata M., Miyata T., Albert M., Naksoya H., Naksoya H., Hirata M., Miyata T., Albert M., Naksoya H., Hirata M., Miyata T., Albert M. Miyata M., Naksoya H., Hirata M., Miyata T., Miller M., Naksoya H., Hirata M., Miyata T., Miller M., Naksoya M., Miller M., Naksoya H., Hirata M., Miyata T., Miller M., Naksoya M., Miller M., Naksoya M.	MEDLINE-88234495; FUDNEG-2797495; Kuepper H.; Kuepper H.; Kuepper H.; Kuepper H.; Kuepper H.; Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MALLET-FOOY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Trey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE; MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nakao H., Saino Y., Arai K.,	MEDLINE-88234495; FUDMEG=2397495; GUIDDIAND U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (P491: homology with the lipocortin family."; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FCGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauthmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Mattaliano R.J., Sinclair L.K., Miller G.T Hessbach C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funnakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDDLINE-88139278; PubMed-2963810; T.D. MEDLINE-88139278; PubMed-2963810; T.D. M. M. A., AND SEQUENCE.	MEDLINE-88234495; FUDNEd=2397495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. MEDLINE-8873202; PubMed-2968983; Pepinsky R.B. 71zard R., Mattalano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "I've distrinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Trimary structure of human placental anticoagulant protein."; Biochemistry 26:8817-882(1987). [55] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	MEDLINE-8824495: FUDMEG=239/495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. US.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FCGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a But J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessblon C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primakosh	MEDLINE-8824495; FUDMEd=239/495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REDINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepilosky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frinary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092(1987).	MEDLINE-8824499: FUDMEd=229/499: Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a But J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hessbaton C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
MEDLINE-88234495; Pubmed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocentin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FORY I., Reutalingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a secuence FROM N.A. MEDLINE-8827322; PubMed-296898; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calculum and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 253:10799-10811(1988). J. Biol. Chem. 253:10799-10811(1988). J. Biol. Chem. 263:10799-10811(1988). J. Biochemistry 26:8087-8092(1987). Finakosh T., Handrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE: MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Andring Mizoguchi T., Mandrickan H., Hirata M., Miyata T., Andring Mizoguchi H.,	MEDLINE-88234495; Pubmed-2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Cubracterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein CP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein CP4: Naudelingsperger C.P.M., Pleters J., Bodo G., SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. [2] Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Clonida and expression of CDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; Pubmed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Pubmed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; Pubmed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	MEDLINE-88234495; Pubmed-2967495; Curundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Cubracterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Furtowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. MEDLINE-8813202; PubMed-2968983; Peptinsky R.B. 71zard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; Try Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hend	MEDLINE-88234495; Pubmed-2967495; Gunndmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Cubracterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Fried distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:881780789-10811. [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	MEDLINE-88234495; Pubmed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Clundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Clundmann U., Abel KJ., Bohn H., Loebermann H.; Clantacterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Futur J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8813202; PubMed-2968983; Peptinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; Tyre distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary 26:8087-8092(1987).	MEDLINE-88234495; Pubmed-2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; [2] REQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human protein."; [3] [3] [4] MEDLINE-8827322; PubMed-296898; MEDLINE-8827322; PubMed-296898; MEDLINE-8827322; PubMed-296898; MEDLINE-8827322; PubMed-296898; Frie distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Pulmakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Putmary structure of human placental anticoagulant protein."; Hochemistry 26:8087-809211987.	MEDLINE-88234495; Pubmed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Clundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Clundmann U., Abel RJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Clontaracterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein Read. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann N.; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein. Sinchair J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinchair L.K., Miller G.T Browning J.L., Chow E.P., Mattaliano R.J., Sinchair L.K., Miller G.T Browning J.L., Chow E.P., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frunakoshi T., Hendricke of human placental anticoagulant protein.";
MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGLE FROM N.A., AND PARTIALS EQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Tcloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). Bellinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:807807-8092(1987). [5] Ewaski A., Suda M., Nanb SEQUENCE. MEDLINE-88139778; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Khizoguchi T., Sato E., Yoshizaki H., Hirata M., Miyata T., Khizoguchi T., Manchizaki M., Manchizaki H., Mizaki M., Miyata T., Khizoguchi T., Manchizaki M., Manchizaki M., Manchizaki M., Manchizaki M., Manchizaki M., Manchizak	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGLE FROM N.A., AND PARTILL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [3] Eur. J. Biochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; Pephinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Funakcshi A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] [2] REDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8813202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Primary 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; Primary 26:8087-8092(1987). [6] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963810;	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EDGUED FROM N.A., AND PARTILL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fody I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [3] Eur. J. Biochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Peplinsky R.B. "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). KEUBKOR EROM N.A. MEDLINE-88163463; PubMed-2964863; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8892(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-881392/8; PubMed-2963810;	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (FP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Tive distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Fundary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGLE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). Burner B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Horbenistry 26:8087-8092(1987).	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REDIENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88123202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessalon C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
MEDINE-88234495; PubMed-2967495; Grudmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Forder C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid.binding protein."; Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139778; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., And Should A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., And Should A., Suda M., Nakao H., Nakao H., Hirata M., Miyata T., Arian Y. M., Nakao H., Nakai M., Nakao H., Na	MEDINE-88234495; PubMed-2967495; Grudmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURE-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-8815345; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8992(1987). [5] Funakoshi A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGLE FROM N.A., AND PARTILL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B. Tizard R., Mattalano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Tive distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; Perlmary structure of human placental anticoagulant protein."; [6] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubM	MEDINE-88234495; PubMed-2967495; Grudmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [3] Eur. J. Biochem. 174:585-592(1988). MEDLINE-88273202; PubMed-296898; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Fue distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Datol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:88178902(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGLE FROM N.A., AND PARTILL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-813202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Tive distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Fundary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	MEDINE-88234495; PubMed-2967495; Grubenmann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REDLINE-88271329; PubMed-2455636; MADLINE-88271329; PubMed-2455636; MADLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid.binding protein."; Eur. J. Biochem. 174:585-592(1988). Eur. J. Biochem. 174:585-592(1988). REDLINE-88273202; PubMed-296893; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Hang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGLE FROM N.A., AND PARTILL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Fundacy Structure of human placental anticoagulant protein."; Frimary structure of human placental anticoagulant protein.";
Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-882731329; PubMed-245636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, as Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I."; [4] SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-8815453: PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] MEDLINE-88139778; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Anderson H., Nasoya T., Saino Y., Anderson H., Nasoya H., Nasoya T., Saino Y., Anderson H., Nasoya T., Sain	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245536; MAULENE-8271329; PubMed-245536; MAURET-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, as Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Hanng KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Fryte distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., And SEQUENCE MEDLINE-88159278; PubMed-2964863; Funakoshi T., And SEQUENCE MEDLINE-88139278; PubMed-2964863; Funakoshi A., Suda M., Nakao H.,	MEDIINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Forman R.; Toning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Buchem. 174:585-592(1988). SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. Medica Page 1880. [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furanzy structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein."; Perimary structure of human placental anticoagulant protein."; Primary Structure of human placental anticoagulant protein."; Perimary Medical Perimary Structure of human placental anticoagulant protein.	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REDLINE-88271329: pubMed-2455636; MADLINE-88271329: pubMed-245636; MADLINE-88271329: pubMed-245636; MADLINE-88271329: pubMed-245689]. Stratowa C., Hauptmann R.; Cal-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). Eur. J. Biochem. 174:585-592(1988). REDLINE-88273202; PubMed-296893; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:807-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88153278; PubMed-2963810;	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. 71zard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Tive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary 26:8087-8092(1987).	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REDIINE-88271329; PubMed-245536; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, as Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pephinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Reinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.;	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; Pubmed-245536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Trey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
MEDLING-8 RADA N.A. MEDLING-8 RADA N.A. MEDLING-8 RADA N.A. Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245536; MAURIE-7FGGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R. "Cloning and expression of CDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", "Five distinct calcium and phospholipid binding protein.", "Firmary structure of human placental anticoagulant protein.", "Frimary structure of human placental anticoagulant protein.", Blochemistry 26:8087-8092(1987). [5] Maizoguch H. Sada M., Nakso H., Nakoya T., Saino Y., Arai K., phisaria, A., Suda M., Nakso H., Nakoya T., Saino Y., Arai K., phisaria, Mizoguch H., Nako H., Nakoya T., Saino Y., Arai K., phisaria P., Mizoguch H., Nakoya H., Hirata M., Miyata T., phisary P., Mizoguch H., Nakoya H., Hirata M., Miyata T.,	SEQUENCE FROM N.A. MEDLINE-88234445; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, as ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:385-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815345; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8992(1987). [5] Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8992(1987). [6] MEDLINE-88153278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Brinary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8992(1987). [7] MEDLINE-88153278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Brinary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8992(1987). [8] MEDLINE-88153278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nak	MEDLINE-88234495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, SEQUENCE FROM N.A. [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A., Mathaliano R.J., Sinclair L.K., Miller G.T Proving J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Sinclair L.K., Miller G.T Frow distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; MEDLINE-881	SEQUENCE FROM N.A. MEDLINE-882344455; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, as Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEGOENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Pubmed -296893; Fere distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). Funackoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Brimary structure of human placental anticoagulant protein."; Brimary structure of human placental anticoagulant protein."; Blochemistry 26:807-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauer-Feogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [3] Eur. J., Chow E.P., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Boll. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary Structure of human placental anticoagulant protein.";	SEQUENCE FROM N.A. MEDLINE-88234465; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein.";	MEDLINE-8ROW N.A. MEDDINGE FROM N.A. MEDDINGE FROM N.A. Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8827322; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Lession C., Frey A.Z., Wallner B.P.; Lession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Nachter L. Hession C., Ency A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Nachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Nachter L. Hension Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
SEQUENCE FROM N.A. SEQUENCE. SCI. U.S.A. 88:3708-3712(1988). SEQUENCE FROM N.A. SCI. U.S.A. 88:3708-3712(1988). SEQUENCE FROM N.A. SEQUENCE	SEQUENCE FROM N.A. SEQUENCE. SEQUENCE FROM N.A. SEQUENCE SEQUE	SEQUENCE FROM N.A. SEQUENCE TROM Of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family. [2] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; Pepinsky R.B. Tizard R. MELLINE-88273202; PubMed-296898; Pepinsky R.B. Tizard R. MELLINE-88273202; PubMed-296888). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2964863; Pepinsky R.B. SEQUENCE FROM N.A. MEDLINE-8813403; PubMed-2964863; Funakcshi T., Hendrickson L.E. MEDLINE-88139278; PubMed-2964863; Funakcshi T., Hendrickson L.E. MEDLINE-88139278; PubMed-2963810; Funakcyni T. Funakcyni T. Funakcyni T. Funakcyni T. Funakcyn	SEQUENCE FROM N.A. SEQUENCE. SEQUENCE FROM N.A. SEQUENCE SEQUE	SEQUENCE FROM N.A. SEQUENCE. SEQUENCE SEQUENCE SEQUENCE MALLE-88271329; PubMed-2455636; MALLE-FROM N.A. SEQUENCE MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; SEQUENCE SECUENCE SEQUENCE SECUENCE SEQUENCE SEQUE	SEQUENCE FROM N.A. SEQUENCE SEQUENCE FROM N.A. SEQUENCE SEQUEN	SEQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE TROM N.A. SEQUENCE TROM Of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family. [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FROM J., RAUGLAINGSPERGE C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R. "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pephisky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
SEQUENCE FROM N.A. MEDLINE-8823495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8816343; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimakoshi T., Seato B., Nawa J., Nasiyan T., Saino Y., Arai K., MEDLINE-8813278; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Shidan M., Nakao H., Nakao H., Nagoya T., Saino Y., Arai K., Shidan W., Nakao H., Nakao H., Hirata M., Miyata T., Shidan W., Nakao H., Hirata M., Miyata T., Shidan W., Nakao H., Nakao H., Hirata M., Miyata T., Shidan W., Nakao H., Nakao H., Hirata M., Miyata T., Shidan W., Nakao H., Nakao H., Hirata M., Miyata T., Shidan W., Nakao H.,	SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Cal-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with man placental anticoagulant protein."; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] Funakoshi T., And SEQUENCE ROM N.A., Suda M., Nakao H., Nakao H., Nakao H., Saino Y., Arai K., MEDLINE-88153078; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nakao H.	SEQUENCE FROM N.A. MEDLINE-88234495; bubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Ruepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauter-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary Structure of human placental anticoagulant protein."; "Frimary Structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; Pubmed-2963810; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; Pubmed-2963810; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; Pubmed-2964863; Pubmed-2963810; SEQUENCE FROM N.A., AND SEQUENCE.	SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R. [2] Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein.; [3] Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A., Mallane B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; [4] Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I.; [4] SEQUENCE FROM N.A., Mallane B.P.; Funda C., Frey A.Z., Mallane B.P.; Funda C., Frey B.C., Funda C., Frey B.C., Funda P.C., Funda C., Frey B.C., Funda B.C., Funda C., Funda B.C., Funda B	SEQUENCE FROM N.A. MEDLINE-88234495; bubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hessbon C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.;	SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Matllner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with limpocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with limpocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with limpocortin I."; "Find Mail of Ma	SEQUENCE FROM N.A. MEDLINE-88234495; bubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAULET-FROM I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of the second of phospholipid binding proteins share homology with lipocortin I."; SEQUENCE FROM N.A. HENSELONG C., Frey A.Z., Walliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; SEQUENCE FROM N.A. MEDLINE-88183463; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakcshi T., Hendrick of human placental anticoagulant protein.";
SEQUENCE FROM N.A. MEDLINE-88234495; bubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAULET-FROM T., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-8813278; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Philosophia A., Suda M., Nako H., Hirata M., Miyata T., Philosophia M., Nakoo H., Nakoya T., Saino Y., Arai K., Philosophia M., Nakoo H., Hirata M., Miyata T., Philosophia M., Nakoo H., Nakoo H., Hirata M., Miyata T., Philosophia M. M., Nakoo H., Hirata M., Miyata T., Philosophia M. M., Nakoo H., Hirata M., Miyata T., Philosophia M. M., Nakoo H., Hirata M., Miyata T., Philosophia M. M., Nakoo H., Mangoya T., Saino Y., And K., Philosophia M., Nakoo H., Nakoo H	SEQUENCE FROM N.A. MEDLINE-88234495; bubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAULET-FROM T., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A., MALLINEL B.P.; Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blool. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964803; Iwasaki A., Suda M., Nakao H.,	SEQUENCE FROM N.A. MEDLINE-88234495; DubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Butter-Fogy I., Reutelingsperger C.P.M., Pieters J., Buchem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Frimary Structure of human placental anticoagulant protein."; Frimary Structure of human placental anticoagulant protein."; MEDLINE-88139278; PubMed-2964863; MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963	SEQUENCE FROM N.A. MEDLINE-88234495; bubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratoma C., Hautmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Tive distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:881634863; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88183278; PubMed-2964863; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88183278; PubMed-2963810;	REDLINE-88234495; DubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Kuepper H.; Kuepper H.; Kuepper H.; Rubaracterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann N.; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessbon C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.;	SEQUENCE FROM N.A. MEDLINE-88234495; bubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNa encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Foyy I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). Punakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinary structure of human placental anticoagulant protein."; Pranakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinary structure of human placental anticoagulant protein.";	SEQUENCE FROM N.A. MEDLINE-88234495; bubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular in the cal-dependent phospholipid-binding protein."; Further Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Five distinct calcium and phospholipid binding proteins; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
SEQUENCE FROM N.A. MEDILINE-88234495; DubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAULET-FROY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R., "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, s EQUENCE FROM N.A. "Elochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcum and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 253:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Philosophy N., Naki N., Nakao H., Hirata M., Miyata T., Philosophy N., Naki N., Nakao H., Hirata M., Miyata T., Philosophy M., Naki N., Nakao H., Hirata M., Miyata T., Philosophy M., Naki N., Nakao H., Hirata M., Miyata T., Philosophy M., Naki M., Nakao H., Hirata M., Miyata T., Philosophy M., Naki M., Nakao H., Hirata M., Miyata T., Philosophy M., Naki M., Nakao H., Hirata M., Miyata T., Philosophy M., Naki M., Nakao H., Nakao H., Hirata M., Miyata T., Philosophy M., Naki M., Nakao H., Hirata M., Miyata T.,	SEQUENCE FROM N.A. MEDILINE-88234495; DubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MALLET-FROY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frantary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Funakoshi A., Suda M., Nabao H., Nagoya T., Saino Y., Arai K.,	SEQUENCE FROM N.A. MEDILINE-88234495: PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PH4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. US.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FCGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Fuatowa C., Hauptmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Fuatoma C., Hauptmann N.; "SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein.";	SEQUENCE FROM N.A. MEDILINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 83:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stracwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five district calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:881780789-10811(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	SEQUENCE FROM N.A. MEDITE-88234495: PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PH4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. US.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDIINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Furch Edge Second N.A. MEDIINE-88273202; PubMed-2968983; BEDIINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDIINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Primary 26:8087-8092(1987).	SEQUENCE FROM N.A. MEDILINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frunakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.;	SEQUENCE FROM N.A. MEDILINE-88234495: PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. US.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hessbach C., Fiery A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel RJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Cundmann U., Abel RJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Cundmann U., Abel RJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 83:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FCGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R. B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Prive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakosh T., Handrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8028(1987). SEQUENCE FROM N.A., AND SEQUENCE: MEDLINE-8813278; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Anderson M., Nako H., Hirata M., Miyata T., Anderson E. Medlines, H., Hirata M., Miyata T., Anderson E. Malachizaki H., Hirata M., Miyata T., Anderson E. M., Nakou H., Hirata M., Miyata T., Anderson E. M., Nakou H., Hirata M., Miyata T., Anderson E. M., Nakou H., Hirata M., Miyata T., Anderson E. M., Nakou H., Hirata M., Miyata T., Anderson E. M., Nakou H., Hirata M., Miyata T., Anderson E. M., Nakou H., Hirata M., Miyata T., Anderson E. M., Nakou H., Hirata M., Miyata T., Miller M., Nakou H., Nakou H., Hirata M., Miller M., Nakou H., Nakou H., Nakou H., Nakou H., Nakou H., Nakou H.,	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EDGUNGE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; [3] Eur. J. Biochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-8827322; PubMed-296898; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Trive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Denol. Chem. 263:10799-10811(1988). [44] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Fundarcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [55] SEQUENCE FROM N.A. AND SEQUENCE MEDLINE-88139278; PubMed-2963810; Iwassaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Cundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratcoa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88132302; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary Structure of human placental anticoagulant protein."; "Frimary 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary Structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary 26:8087-8092(1987).	MEDLINE-88234495; PubMed-2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] Exource FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Pepinsky R.B. Tizard R., Burner C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8892(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	MEDLINE-88234495; Dubmed-2967495; Grundmann U., Abel RJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubmed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Strackow C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-881232; Pubmed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.J., Walliner B.P.; "Tive distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; "Primary 26:8087-8092(1987).	MEDLINE-88234495; PubMed-2967495; Groundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; [2] ENCO. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENCO. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENCO. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EMEDLINE-88271329; PubMed-2455636; MAURET-FORY I. Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Homology and Proceeding Proceedins Structure of human placental anticoagulant protein.";	MEDLINE-88234495; Dubmed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptanan R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88132302; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; pubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi I., Hendrick Con L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
MEDLINE-88234495; PubMed=2967495; MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Ruepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Stratowa C., Hauptmann R.; Buronning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. MEDLINE-8873202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share benonlogy with lipocortin I."; Biol. Chem. 263:10799-10811(1988). [4] SEDUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; "Frimary structure of human placental anticoagulant protein."; "Frimary structure of human placental anticoagulant protein."; "Frimary A. Suda M., Nakao H., Nagoya T., Saino Y., Arai K., MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Miscouchi T., Saino F. Wohlzaki H., Hirata M., Miyata T., Miscouchi T., Hirata M., Makao H., Nakao H., Naka	EDUINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid.binding protein."; Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-8815345; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Finary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8992(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2963810; Iwassaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	MEDLINE-88234495; PubMed-2967495; MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGLE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; "Primary Structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; MEDLINE-88139278; PubMed-2964863	EQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURE-FROMY I., Reutellingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [3] Eur. J. Biochem. 174:585-592(1988). MEDLINE-88273202; PubMed-296898; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8817-892(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	MEDLINE-88234495; PubMed-2967495; MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGLE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [2] Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Tive distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Fundary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Primary 26:8087-8092(1987).	EQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a clastoma expression of cDNA for human vascular anticoagulant, selection and expression of cDNA for human vascular anticoagulant, a clast-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Heaston C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092(1987).	MEDLINE-88234495; PubMed-2967495; MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8817322; PubMed-2968983; MEDLINE-8817322; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein.";
MEDLINE-88234495; PubMed-2967495; MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Haupfunann R.; Stratowa C., Haupfunann R.; Stratowa C., Haupfunann R.; Stratowa C., Haupfunann R.; Scholmer FROM N.A. SEQUENCE FROM N.A. MEDLINE-8817320; PubMed-2968983; MEDLINE-8817320; PubMed-2968983; MEDLINE-8817320; PubMed-2968983; MEDLINE-8817320; PubMed-2968983; MEDLINE-8817320; PubMed-2968983; MEDLINE-8817320; PubMed-2968983; MEDLINE-8813323; PubMed-2968983; MEDLINE-8813323; PubMed-2968983; Frimary Structure of human placental anticoagulant protein."; [4] MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; "Primary A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., MEDLINE-88139278; PubMed-2963810; Miscoguchi H., Nagoya T., Hirata M., Miyata T., Miscoguchi H., Nakao H., Nagoya T., Hirata M., Miyata T., Miscoguchi H., Nakao H., Nagoya H., Nakao	[1] SEQUENCE FROM N.A. MEDIINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed=245636; MAURET-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cal-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed=296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blool. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8992(1898). [5] SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2963810; Iwassaki A., Suda M., Nakao H., Nakao H., Nakao H., Saino Y., Arai K.,	EQUENCE FROM N.A. MEDITNE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutellngsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Tcloning and expression of cDNA for human vascular anticoagulant, a cal-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Tive distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furnakoshi T., Hendrickson L.E.	[1] SEQUENCE FROM N.A. MEDIINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a clastomy and expression of cDNA for human vascular anticoagulant, a score of human phospholipid. Amataliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:88178902(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	[1] SEQUENCE FROM N.A. MEDITNE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutellngsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular but a stocker J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	[1] SEQUENCE FROM N.A. MEDIJNE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDIJNE-88271329; PubMed-245636; MAURET-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, as Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pephinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primakoshi T., Hendrickson L.E., McMullan Janticoagulant protein."; Primary St. Stagus P. B. McMullen B.A., Fujikawa K.; Primakoshi T., Hendrickson L.E., McMullan Janticoagulant protein.";	[1] SEQUENCE FROM N.A. MEDIINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88171329; PubMed-245536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Mang B.D., Chom. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88183465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fuimary structure of human placental anticoagulant protein."
EQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Demology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-8821329; PubMed-2455698. MAUKET-POGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., FISTATOWA C., Haughtmann R.; SCIATOWA C., Haughtmann R.; SCIONING and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein.*; Eur J. Blochem. 174:865-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; MEDLINE-88173202; PubMed-2968983; MEDLINE-88173202; PubMed-2968983; MEDLINE-8810303; PubMed-2968989. Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I.*; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I.*; MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fulmary Structure of human placental anticoagulant protein.*; Frimary Structure of human placental anticoagulant T., Harding M., Makao H., Magoya T., Saino Y., Arai K., MEDLINE-88119278; PubMed-2963810; Iwasaki A., Suda M., Makao H., Nagoya T., Saino Y., Arai K., MEDLINE-88119278; PubMed-2963810; Miscoguchi T., Saino F., Wallaki H., Hirata M., Miyata T., Miscoguchi T., Saino F. Yoshizaki H., Hirata M., Miyata T., Miscoguchi T., Miscoguchi H., Miscoguchi H	EQUENCE FROM N.A. MEDLINE-8823445; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245536; MAURET-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peppinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Wallner B.P.; Fryte distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blool. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8992(1987). SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88153278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8992(1981); Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	EQUENCE FROM N.A. MEDLINE-8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Sinclair L.K., Miller G.T Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-8813465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Brimary structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; MEDLINE-88139278;	[1] SEQUENCE FROM N.A. MEDLINE-8823445; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245536; MAURET-FCGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8817-892(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	EQUENCE FROM N.A. MEDLINE-8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] Exatowa C., Frey A.Z., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Trive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikama K.; "Primary Structure of human placental anticoagulant protein."; "Primary Structure of human placental anticoagulant protein.";	[1] SEQUENCE FROM N.A. MEDLINE-8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245536; MAURET-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann N.; "Cloning and expression of CDNA for human vascular anticoagulant, as Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peppinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] Elol. Chem. 263:10799-10811(1988). [8] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein.";	[1] SEQUENCE FROM N.A. MEDLINE-8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-8818463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
EQUENCE FROM N.A. MEDLINE-8823495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-8821329; PubMed-2455636; MAUCE-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Haughumann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein."; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share boomed to the second sec	[1] SEQUENCE FROM N.A. MEDLINE-8023445; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-80271329; pubMed-245636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:385-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Fre distinct calcium and phospholipid binding proteins share homology with light of them placental anticoagulant protein."; [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Frimary Structure of	[1] SEQUENCE FROM N.A. SEQUENCE GROAN A.A. SEQUENCE GROAN A.A. SEQUENCE GROAN A.A. SEQUENCE TO GENTA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family. Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fooy I., Requelingsperger C.P.M., Pieters J., Bodo G., Stratcowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein.", "Cloning and expression of cDNA for human vascular anticoagulant, a Ga2+-dependent phospholipid-binding protein.", "Cloning and expression of cDNA for human vascular shier Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.D., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.A., Fujikawa K.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Boll. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88139278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; MEDLI	[1] SEQUENCE FROM N.A. MEDLINE-8823445; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURE-FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88171329; PubMed-245636; MAUCHINE-88171329; PubMed-245636; MAUCHINE-88171329; PubMed-296898; Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-296898; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Hang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:88178902(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964810;	[1] SEQUENCE FROM N.A. SEQUENCE GROAN A.A. SEQUENCE GROAN G. Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mather-Froy I., Requelingsperger C.P.M., Pieters J., Bodo G., Strattowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; PEPINSKY R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Fundsy structure of human placental anticoagulant protein."; Frimary structure of human placental anticoagulant protein.";	[1] SEQUENCE FROM N.A. MEDLINE-8823445; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88371329; PubMed-245636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Prinary structure of human placental anticoagulant protein."; "Prinary structure of human placental anticoagulant protein.";	[1] SEQUENCE FROM N.A. MEDLINE-6823445; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] U. Grow E.P., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Sinclair L.K., Miller G.T Frow distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Boll. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frunakoshi T., Hendricke of human placental anticoagulant protein.";
### SEQUENCE FROM N.A.	SEQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-8823445; PubMed-2967495; Grundmann U., Abel K.J., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8007-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88153278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	EDURICE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAULE-FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAULE-FROM N.A., AND PARTIAL SEQUENCE. "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a sequence FROM N.A. MEDLINE-88273202; PubMed-2968983; PEDLINE-88273202; PubMed-2968983; PEDLINE-882700 C., Frey A.Z., Walliner B.P.; Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share sequence FROM N.A. MEDLINE-88139436; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Frimary Structure of human placental anticoagulant protein.";	SEQUENCE FROM N.A. MEDLINE-8823445; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8871329; PubMed-245636; MAURET-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blod. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-8815345; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8017-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; REDLINE-88153278; PubMed-2963810;	ESQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAULE-FROM I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a gratement phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesskon C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Fundschiz Structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	SEQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-745536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Blol. Chem. 263:10799-10811(1988). [4] Blol. Chem. 263:10799-10811(1988). REDUINE-88153463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frinary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092.1087).	SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; Cloning and expression of CDNA for human vascular anticoagulant, a cazt-dependent phospholipid-binding protein.*; Cloning and expression of CDNA for human vascular anticoagulant, a cazt-dependent phospholipid-binding protein.*; EUT. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; PEPINSKY R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.*; J. Boll. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8818405; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrick of human placental anticoagulant protein.*;
MEDLINE-8813445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Grundmann U., Abel KJ., Bohn H., Loebermann Placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Malure F.P., M., Pieters J., Bodo G., Stratowa C., Hauptmann R., Caloning and expression of cDNA for human vascular anticoagulant, a Ca2+ dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, a SEQUENCE FROM N.A., Nabbed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Phomology with lipocortin I."; Fuller EROM N.A. AND SEQUENCE FROM N.B., Thendrickson L.R., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Frimary and McMaco H., Nagoya T., Saino Y., Arai K., Miller M., Nakao H., Nagoya T., Saino Y., A	SEQUENCE FROM N.A. MEDLINE-8023495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-82731329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a Cal-dependent phospholipid-binding protein.; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Matllner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.', J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8007-8092(1987). [5] Funakoshi T., And SEQUENCE MEDLINE-88139278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8007-8092(1987). [5] Funakoshi A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocentin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURER-FROM I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Lochem. 174:585-592(1988). [3] SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Peptinsky With lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share branked-186863; Fundscall B. Seguence From U.B. Weduller B.A., Fujikawa K.; Fundscall B. Seg	SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-8023495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-80271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frie distinct calcium and phospholipid binding proteins share homology with lipocortin I."; From Gistinct calcium and phospholipid binding proteins share homology with lipocortin I."; SEQUENCE FROM N.A., Mallner B.P.; Frimary structure of human placental anticoagulant protein.";	SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURER-FORY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular batcoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a But J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hessiston C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Fundary structure of human placental anticoagulant protein."; "Frimary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	SEQUENCE FROM N. A. SEQUENCE FROM N. A. SEQUENCE FROM N. A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Characterization of cDNA encoding human placental anticoagulant Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratcowa C., Hauptmann R.; Cloning and expression of CDNA for human vascular anticoagulant, a Cal-dependent phospholipid-binding protein."; Cal-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. Matallan B.P.; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Bunne C., Huang KS., Pratt D., Wachter L. Five distinct calcium and phospholipid binding proteins share homology with hippocortin I.", J. Biol. Chem. 263:10799-10811(1988). Eliol. Chem. 263:10799-10811(1988). Pinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson	SEQUENCE FROM N.A. MEDLINE-8823495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAULET-FROM I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Huuptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of the content of the coartened of the coa
MCBLINE-80134495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Chracterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-FROGY I., Rettellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann & Ca2+dependent phospholipid-binding protein."; Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein."; Four J. Biochem. 174:565-592(1988). [3] Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T SEOUENCE FROM N.A. SEQUENCE FROM N.A. Malhar B.P.; Furnet D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share benonlogy with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. AND SEQUENCE HEDDLINE-88139278; PubMed-2953810; IWASABA H., Bida M., Nakao H., Hirata M., Miyata T., Mixoquchi J. Saino Y., Arai K., Mixian M., Miyata H., Hirata M., Miyata T., And M., AND SEQUENCE H. A. SAINO Y. A. AND SEQUENCE H. A. SAINO Y. A. AND SEQUENCE H. A. SAINO Y. A. AND SEQUENCE H. A. SAINO	PEDLINE-88234495; PubMed-2967495; Rebermann H., Lottspeich F., MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Haung KS., Pratt D., Wachter L. Browning J.L., Chow B.P., Burne C., Haung KS., Pratt D., Wachter L. Hesslon C., Trey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blool. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8007-8092(1987). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8007-8092(20810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	PEDLENCE FROM N.A. MEDLINE-88234495; DibMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauter-Foyy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Punded C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesskon C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Fundary structure of human placental anticoagulant protein."; Frimary Structure of humbed-2963810; Fundary Structure of humbed-2963810; Fundary Structure of human placental anticoagulant protein."; Frimary Structure of human placental anticoagulant protein."; Frimary Structure of humbed-2963810; Fundary Structure of humbed-2963810; Fundary Structure of human placental anticoagulant protein.";	PEDLINE-88234495; Debmed-2967495; SEQUENCE FROM N.A. MEDLINE-88234495; Debmed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PH4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. US.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Further B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein."; SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	DEDUCE FROM N.A. MEDLINE-88234495; DubMed-2967495; Gebermann H., Lottspeich F., Kuepper H.; Rubitaracterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Foyy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a cal-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Mataliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Mataliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Walther B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; PubMed-2964863; Fundary structure of human placental anticoagulant protein."; Frimary structure of human placental anticoagulant protein."; Frimary structure of human placental anticoagulant protein.";	13 SEQUENCE FROM N.A. MADE MJ., Bohn H., Loebermann H., Lottspeich F., MEDLINE-88234495; DubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Photoc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDINE-88271329; PubMed-2455636; Matter-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R., "Cloning and expression of cDNA for human vascular anticoagulant, a Caz+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Mathlane B.P.; Pract D., Wachter L. Hession C., Frey A.Z., Walllen B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", SEQUENCE FROM N.A. MEDLINE-88153453; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen Janchemistry 26:8087-809210987.	13 SEQUENCE FROM N.A. MEDLINE-88234495; DEBNEGE FROM N.A. MEDLINE-88234495; DEBNEGE FROM N.A. MEDLINE-88234495; DEBNEGE FROM N.A. MEDLINE-88234495; DEBNER H.; Catalogy N. Catalogy With the lipocortin family. Catalogy N. Peters N.A. MEDLINE-88271329; PubMed-2455636; MAURER-FORY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein. Catalogy N. Stratowa C., Mauptmann R.; Catalogy N. Stratowa C., Mauptmann R.; Catalogy N. Catalogy N.
WEDLINE-80134495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4); homology with the lipocortin family.*; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed=2455636; Maurer-Footy I., Rettellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R. Conning and expression of cDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein.*; Cloning and expression of cDNA for human vascular anticoagulant, a SEQUENCE FROM N.A. Mallner B. P. SCOUENCE FROM N.A. Mallner B. P. SEQUENCE FROM T., Chow E.P., Burne C., Huang KS., Pratt D., Machter L. Hession C., Frey A.Z., Wallner B. P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A., AND SEQUENCE Browning J. Hendrickson L. E., McMullen B.A., Fujikawa K.; Fuinary structure of human placental anticoagulant protein."; "Frimary A. Salos P. Moscolence PROM N.A. AND SEQUENCE PROM N.A. AND SEQUENCE N.A. A.	MEDLINE-88234495; DubMed-2967495; SEQUENCE FROM N.A. MEDLINE-88234495; DubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A., Matlant B.P.; Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Frey A.Z., Wallner B.P.; Browning J.L., Chow B.P.; Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Blol. Chem. 263:10799-10811(1988). [4] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.", Blochemistry 26:8007-8092(20810). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.", Blochemistry 26:8007-8092(20810). [5] Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	NUEL_LAXILE_SOUGE SEQUENCE FROM N.A. MEDIINE_88234495; DubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE_88271329; PubMed=2455636; MAURET-FORY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauthmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE_88273202; PubMed=2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE=8813463; PubMed=2964863; Fundary structure of human placental anticoagulant protein."; "Frimary Structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE=88139278; PubMed=2963810; MEDLINE=88139278; PubMed=2963810;	NEBLINATION N.A. MEDILINE-88234495; Dubmed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8873202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattalano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "I've distrinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Timakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:88154863; PubMed-2964861; SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; SEQUENCE FROM N.A. MEDLINE-8816367-8992(1987). SEQUENCE FROM N.A. MEDLINE-8816367-8992(1987). SEQUENCE FROM N.A. MEDLINE-8816367-8992(1987).	Use Comparison of the control of	NEDLINE-88234495; MEDLINE-88234495; MEDLINE-88231329; MEDLINE-88231329; MEDLINE-88271329; MEDLINE-88271320; MEDLINE-87271320; MEDLINE-87271320; MEDLINE-871220; MEDLINE-871220	NEDITIONALY SOURCE FROM N.A. MEDITIONALY SOURCE FROM N.A. MEDITIONE 88234495; DubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Foyy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pubmed C., Huang KS., Pratt D., Wachter L. Hesskon C., Frey A.Z., Walliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Bool. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi I., Hendrick of human placental anticoagulant protein.";
NCBL_TAXID=9000; NCBL_TAXID=9000; SEQUENCE FROM N.A. Kuepper H.; Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-FOOTY I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R. Schelling protein."; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:865-592(1988). [3] Eur. J., Enchen. 174:865-592(1988). [3] Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Wallner B.P.; SEQUENCE FROM N.A. SEDUENCE FROM N.A. SEQUENCE FROM N.A.	NCBL_TAXID=9006; SEQUENCE FROM N.A. MEDITAE.48234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAULE-FROM J., Reutelingsperger C.P.M., Pieters J., Bodo G., Strattowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A., MAILINE B.P.; Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P.; Rayliner Galstinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8007-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2964803; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8007-8092(1987). [5] MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nakao	NCBL_TAXID=9006; SEQUENCE FROM N.A. MEDILNE=88234495: PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (Priv): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND FARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauthmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8827302; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessiston C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share sequence from N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Frimary Structure of human placental anticoagulant protein.";	NCBL_TRAXLD=9006; SEQUENCE FROM N.A. MEDILINE=88234495; bubmed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Fur J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five district calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). Kenakoshi T., Handrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:881780789(1987). SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88339278; PubMed-2263810;	NCBL_TAXID=9006; SEQUENCE FROM N.A. MEDILNE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FCGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	NCBL_TRAXID=9006; [1] SEQUENCE FROM N.A. MEDLINE=88234495; Pubmed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Bur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8827322; PubMed-296898; MEDLINE-8827322; PubMed-296898; MEDLINE-8827322; PubMed-296898; MEDLINE-ROW N.A. Hession C., Frey A.Z., Wallner B.P.; Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Trive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Punakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frianry Structure of human placental anticoagulant protein."; Hochemistry 26:8087-809210987.	NCBL_TRXLD=9006; [13] SEQUENCE FROM N.A. MEDILINE=88234495; bubmed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. US.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed=2455636; MAURET-FCGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauthmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a Stratowa C., Hauthmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE=88273202; pubMed=2968983; Peptinsky R.B., Tizard R., Mataliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesskon C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE=8813463; PubMed=2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frunakoshi I., Hendricksof human placental anticoagulant protein.";
NCBL_TAXID=9606; SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MARTER-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of CDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; EUT. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pephnsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Trey A.Z., Wallner B.P.; SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Handrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; "Frimary Structure of human placental anticoagulant protein.", "MEDLINE-BRIB3278; PubMed-2953810; "MEDLINE-BRIB3278; PubMed-	NCBL_TAXID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAULET-FROM I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Huuptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular shier J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8007-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-8815378; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88153278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed=2455636; MAUER-FCGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinacy Structure of human placental anticoagulant protein.";	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Flye distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funaxcoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; #Filmary structure of human placental anticoagulant protein."; Biochemistry 26:88139278; PubMed=2963810; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed=2963810;	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 83:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; MEDLINE-88373202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fullochemistry 26:8087-8092(1987).	NCBL_TaxID=9606; [13] SEQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed=2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Linchem 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed=296898; Peplinsky R.B. Tizard R., Matliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Balol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frianty Structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092(1987).	NCBL_TaxID=9606; [1]1 SEQUENCE FROM N.A. MEDILINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAUCET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesskon C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein.";
NCIL_TAXID=9606; SEQUENCE FROM N.A. MEDLINE=8824495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant proct in (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T MEDLINE-88273202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; MEDLINE-8813203; PubMed-2968983; Five distinct calchum and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; MEDLINE-88139278; PubMed-2953810; Iwasaki A., Suda M., Makoo H., Magoya T., Saino Y., Arai K., Miscouchi T., Shariaki H., Hirata M., Miyata T., Miscouchi T., Shariaki H., Hirata M., Miyata T., Miscouchi W. Miscouchi H., Miscouchi H., Miscouchi Miscouchi Miscouchi Miscouchi H., Miscouchi Miscouchi H., Miscouchi	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234495: PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FORY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular shier I. SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88159278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Kasaaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; pubMed=4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein.*; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88173202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Fundary structure of human placental anticoagulant protein."; "Five distinct calcium and phospholipid binding protein."; Five distinct calcium and phospholipid succession of the second suc	NCBL_TAXID=9606; SEQUENCE FROM N.A. MEDLINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Calening and expression of cDNA for human vascular anticoagulant, a Calening and expression of CDNA for human vascular stricoagulant, a Calening and expression of CDNA for human vascular stricoagulant, a Fur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B. Tizard R., Mathner B.P.; Peplinsky R.B. Tizard R., Mathner B.P.; Fight distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:88163-8032(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88339278; PubMed-2963810;	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=68234455; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8813202; PubMed=2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen anticoagulant protein."; Fulachemistry 26:8087-8092(1987).	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE-8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] UENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Lioning and expression of CDNA for human protein."; Bur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frianty Structure of human placental anticoagulant protein."; Handrick Probemistry 26:8087-809210987.	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-8828500 C., Frey A.Z., Watlaner B.P.; Hessakon C., Frey A.Z., Watlaner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant proc. Natl. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-2455636; Maurer_Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., SITATOWA C., Haughmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pephnsky R.B.; Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; MEDLINE-8813102; PubMed-2968983; Pephnsky R.B.; MEDLINE-88131079-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; MEDLINE-88139278; PubMed-2953810; Iwasaki A., Suda M., Makoo H., Magoya T., Saino Y., Arai K., Miscouchl T., Saino F. Walley H., Hirata M., Miyata T., Miscouchl T., Miscouchl H., Magoya T., Miscouchl Miscou	NCDI_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant proct nail. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-2455636; MAUTENT FOOY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human accent."; [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; Peptnsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; Peptnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; BEOURINGE FROM N.A. N.A. Wallner B.P.; Frive distinct calchum and phospholipid binding proteins share nonlogy with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. AND SEQUENCE MEDLINE-88139278; PubMed=2964863; Frimary structure of human placental anticoagulant protein."; "Frimary Structure of human placental anticoagulant protein."; SEQUENCE FROM N.A. NAN SEQUENCE. SEQUENCE FROM N., NAN SEQUENCE. SEQUENCE FROM N., NAN SEQUENCE.	NCBI_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furnary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; Furnary 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed=2963810; MEDLINE-88139278; PubMed=296	NCBI_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EMEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular stricoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant." [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B. Tizard R., Matlner B.P.; Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Peplinsky R.B. Tizard R., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funaxcoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8817802(1988). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	NCBI_TaxID=9606; SEQUENCE FROM N.A. MEDLINE-8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; "Primary Structure of human placental anticoagulant protein.";	NCBI_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURE-FROM I. Reutellingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, "Cloning and expression of cDNA for human vascular anticoagulant, "Stratowa C., Hauptmann R.; "Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human pacenten."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092.1087.	NCBI_TaxID=9606; SQUENCE FROM N.A. MEDIINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; MEDLINE-88373202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fringe distinct of human placental anticoagulant protein.";
NCBL_TaxID=9606; [1] [1] [2] [2] [3] [2] [4] [4] [5] [5] [6] [6] [6] [7] [7] [8] [8] [8] [8] [8] [8] [8] [8] [8] [8	NCBL_TaxID=9606; [1] [2] [3] [2] [4] [4] [5] [5] [6] [6] [7] [7] [8] [8] [8] [8] [8] [8] [8] [8] [8] [8	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Luchorne FROM N.A. MEDLINE-8813202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattallano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furinary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Firemary Structure of human placental anticoagulant protein.";	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; MEDLINE-88273202; PubMed-296898; Pepinsky R.B. Tizard R., Mallner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; #Frimary Structure of human placental anticoagulant protein."; #FRIMEDLINE-88139278; PubMed-2963810;	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, [3] SEQUENCE FROM N.A. MEDLINE-8813202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	NCBI_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed=2455636; MAURET-FOGY I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human parcetin."; Bur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed=296893; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092.1087.	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. S21. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Furn J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
NCBL_TaxID=9606; [1] [1] [2] [2] [2] [3] [2] [4] [4] [5] [5] [6] [6] [7] [7] [8] [8] [8] [8] [8] [8] [8] [8] [8] [8	NCBL_TaxID=9606; [1] [2] [3] [2] [4] [4] [5] [5] [6] [6] [7] [7] [8] [8] [8] [8] [8] [8] [8] [8] [8] [8	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Luchorne FROM N.A. MEDLINE-8813202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattallano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furinary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Firemary Structure of human placental anticoagulant protein.";	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; MEDLINE-88273202; PubMed-296898; Pepinsky R.B. Tizard R., Mallner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; #Frimary Structure of human placental anticoagulant protein."; #FRIMEDLINE-88139278; PubMed-2963810;	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, [3] SEQUENCE FROM N.A. MEDLINE-8813202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	NCBI_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed=2455636; MAURET-FOGY I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human parcetin."; Bur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed=296893; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092.1087.	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. S21. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Furn J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
NCBL_TaxID=9606; [1] [1] [2] [2] [2] [3] [2] [4] [4] [5] [5] [6] [6] [7] [7] [8] [8] [8] [8] [8] [8] [8] [8] [8] [8	NCBL_TaxID=9606; [1] [2] [3] [2] [4] [4] [5] [5] [6] [6] [7] [7] [8] [8] [8] [8] [8] [8] [8] [8] [8] [8	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Luchorne FROM N.A. MEDLINE-8813202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattallano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furinary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Firemary Structure of human placental anticoagulant protein.";	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; MEDLINE-88273202; PubMed-296898; Pepinsky R.B. Tizard R., Mallner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; #Frimary Structure of human placental anticoagulant protein."; #FRIMEDLINE-88139278; PubMed-2963810;	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, [3] SEQUENCE FROM N.A. MEDLINE-8813202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	NCBI_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed=2455636; MAURET-FOGY I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human parcetin."; Bur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed=296893; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092.1087.	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. S21. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Furn J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
NCBL_TaxID=9606; [1] [1] [2] [2] [2] [3] [2] [4] [4] [5] [5] [6] [6] [7] [7] [8] [8] [8] [8] [8] [8] [8] [8] [8] [8	NCBL_TaxID=9606; [1] [2] [3] [2] [4] [4] [5] [5] [6] [6] [7] [7] [8] [8] [8] [8] [8] [8] [8] [8] [8] [8	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Luchorne FROM N.A. MEDLINE-8813202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattallano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furinary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Firemary Structure of human placental anticoagulant protein.";	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; MEDLINE-88273202; PubMed-296898; Pepinsky R.B. Tizard R., Mallner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; #Frimary Structure of human placental anticoagulant protein."; #FRIMEDLINE-88139278; PubMed-2963810;	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, [3] SEQUENCE FROM N.A. MEDLINE-8813202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	NCBI_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed=2455636; MAURET-FOGY I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human parcetin."; Bur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed=296893; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092.1087.	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. S21. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Furn J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
NCBL_TaxID=9606; [1] [1] [2] [2] [2] [3] [2] [4] [4] [5] [5] [6] [6] [7] [7] [8] [8] [8] [8] [8] [8] [8] [8] [8] [8	NCBL_TaxID=9606; [1] [2] [3] [2] [4] [4] [5] [5] [6] [6] [7] [7] [8] [8] [8] [8] [8] [8] [8] [8] [8] [8	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Luchorne FROM N.A. MEDLINE-8813202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattallano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furinary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Firemary Structure of human placental anticoagulant protein.";	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; MEDLINE-88273202; PubMed-296898; Pepinsky R.B. Tizard R., Mallner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; #Frimary Structure of human placental anticoagulant protein."; #FRIMEDLINE-88139278; PubMed-2963810;	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, [3] SEQUENCE FROM N.A. MEDLINE-8813202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	NCBI_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed=2455636; MAURET-FOGY I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human parcetin."; Bur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed=296893; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092.1087.	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. S21. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Furn J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
NCBL_TaxID=9606; [1] [1] [2] [2] [2] [3] [2] [4] [4] [5] [5] [6] [6] [7] [7] [8] [8] [8] [8] [8] [8] [8] [8] [8] [8	NCBL_TaxID=9606; [1] [2] [3] [2] [4] [4] [5] [5] [6] [6] [7] [7] [8] [8] [8] [8] [8] [8] [8] [8] [8] [8	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Luchorne FROM N.A. MEDLINE-8813202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattallano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furinary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Firemary Structure of human placental anticoagulant protein.";	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; MEDLINE-88273202; PubMed-296898; Pepinsky R.B. Tizard R., Mallner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; #Frimary Structure of human placental anticoagulant protein."; #FRIMEDLINE-88139278; PubMed-2963810;	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, [3] SEQUENCE FROM N.A. MEDLINE-8813202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	NCBI_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed=2455636; MAURET-FOGY I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human vascular anticoagulant, "Cloning and expression of CDNA for human parcetin."; Bur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed=296893; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092.1087.	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspelich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. S21. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Furn J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant proc. Natl. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-2455636; Maurer_Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., SITATOWA C., Haughmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pephnsky R.B.; Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; MEDLINE-8813102; PubMed-2968983; Pephnsky R.B.; MEDLINE-88131079-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; MEDLINE-88139278; PubMed-2953810; Iwasaki A., Suda M., Makoo H., Magoya T., Saino Y., Arai K., Miscouchl T., Saino F. Walley H., Hirata M., Miyata T., Miscouchl T., Miscouchl H., Magoya T., Miscouchl Miscou	NCDI_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant proct nail. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-2455636; MAUTENT FOOY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human accent."; [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; Peptnsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; Peptnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; BEOURINGE FROM N.A. N.A. Wallner B.P.; Frive distinct calchum and phospholipid binding proteins share nonlogy with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. AND SEQUENCE MEDLINE-88139278; PubMed=2964863; Frimary structure of human placental anticoagulant protein."; "Frimary Structure of human placental anticoagulant protein."; SEQUENCE FROM N.A. NAN SEQUENCE. SEQUENCE FROM N., NAN SEQUENCE. SEQUENCE FROM N., NAN SEQUENCE.	NCBI_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furnary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; Furnary 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed=2963810; MEDLINE-88139278; PubMed=296	NCBI_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EMEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular stricoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant." [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B. Tizard R., Matlner B.P.; Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Peplinsky R.B. Tizard R., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funaxcoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8817802(1988). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	NCBI_TaxID=9606; SEQUENCE FROM N.A. MEDLINE-8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; "Primary Structure of human placental anticoagulant protein.";	NCBI_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURE-FROM I. Reutellingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, "Cloning and expression of cDNA for human vascular anticoagulant, "Stratowa C., Hauptmann R.; "Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human pacenten."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092.1087.	NCBI_TaxID=9606; SQUENCE FROM N.A. MEDIINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; MEDLINE-88373202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fringe distinct of human placental anticoagulant protein.";
NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant proc. Natl. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-2455636; Maurer_Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., SITATOWA C., Haughmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pephnsky R.B.; Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; MEDLINE-8813102; PubMed-2968983; Pephnsky R.B.; MEDLINE-88131079-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; MEDLINE-88139278; PubMed-2953810; Iwasaki A., Suda M., Makoo H., Magoya T., Saino Y., Arai K., Miscouchl T., Saino F. Walley H., Hirata M., Miyata T., Miscouchl T., Miscouchl H., Magoya T., Miscouchl Miscou	NCDI_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant proct nail. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-2455636; MAUTENT FOOY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human accent."; [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; Peptnsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; Peptnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; BEOURINGE FROM N.A. N.A. Wallner B.P.; Frive distinct calchum and phospholipid binding proteins share nonlogy with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. AND SEQUENCE MEDLINE-88139278; PubMed=2964863; Frimary structure of human placental anticoagulant protein."; "Frimary Structure of human placental anticoagulant protein."; SEQUENCE FROM N.A. NAN SEQUENCE. SEQUENCE FROM N., NAN SEQUENCE. SEQUENCE FROM N., NAN SEQUENCE.	NCBI_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furnary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; Furnary 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed=2963810; MEDLINE-88139278; PubMed=296	NCBI_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EMEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular stricoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant." [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B. Tizard R., Matlner B.P.; Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Peplinsky R.B. Tizard R., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funaxcoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8817802(1988). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	NCBI_TaxID=9606; SEQUENCE FROM N.A. MEDLINE-8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; "Primary Structure of human placental anticoagulant protein.";	NCBI_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURE-FROM I. Reutellingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, "Cloning and expression of cDNA for human vascular anticoagulant, "Stratowa C., Hauptmann R.; "Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human pacenten."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092.1087.	NCBI_TaxID=9606; SQUENCE FROM N.A. MEDIINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; MEDLINE-88373202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fringe distinct of human placental anticoagulant protein.";
NCDI_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8824495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant proct and (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; [3] STATOWA C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; [4] MEDLINE-88273202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; MEDLINE-8813202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; MEDLINE-88163463; PubMed-2968983; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; MEDLINE-88139278; PubMed-2953810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., MEDLINE-88139278; PubMed-2953810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Miller M., Marko H., Hirata M., Miyata T., Miller M., Mi	NCIL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8824495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant proct and (PP4): homology with the lipocortin family."; Proc. Nall. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] KEDLINE=88271329; PubMed-2455636; MAUTENT FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-2455636; MAUTENT FROM N.A., AUD PARTIAL SEQUENCE. "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human anticoagulant protein."; [3] SEQUENCE FROM N.A. MEDLINE=88273202; PubMed=2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; SEQUENCE FROM N.A. "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE=88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; SEQUENCE FROM N.A. NaNB SEQUENCE.	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, SEQUENCE FROM N.A. MEDLINE-881731202; PubMed=2968983; BEUT J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8817302; PubMed=2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; FubMed=2964863; Funary structure of human placental anticoagulant protein."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", SEQUENCE FROM N.A. MEDLINE-8815378; PubMed=2964863; Funary structure of human placental anticoagulant protein."; Frimary Structure of human placental anticoagulant protein.";	NCBL_TaxID=9606; SQUENCE FROM N.A. MEDLINE-8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EMEDLINE-88271329; PubMed=2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cal+dependent phospholiphid binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SBOUENCE FROM N.A. MEDLINE-88273202; PubMed=2968983; Peplinsky R.B. Tizard R., Matlner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholiphid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:88163463; PubMed=2964861; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:88178807-8992(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-8839278; PubMed=2963810;	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; "Primary Structure of human placental anticoagulant protein.";	NCBL_TaxID=9606; SQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EMEDLINE-88271329; PubMed=2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human pacental."; Bur. J. Blochem. 174:585-592(1988). Eur. J. Blochem. 174:585-592(1988). MEDLINE-88273202; PubMed=296893; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SGUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frianty Structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092.1087.	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234455; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed=4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein.*; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed=2968983; MEDLINE-883500 C., Frey A.Z., Walliner B.P.; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessisto C., Frey A.Z., Walliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.*; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; pubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein.";
NCDI_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8824495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant proct and (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; [3] STATOWA C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; [4] MEDLINE-88273202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; MEDLINE-8813202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; MEDLINE-88163463; PubMed-2968983; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; MEDLINE-88139278; PubMed-2953810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., MEDLINE-88139278; PubMed-2953810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Miller M., Marko H., Hirata M., Miyata T., Miller M., Mi	NCIL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8824495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant proct and (PP4): homology with the lipocortin family."; Proc. Nall. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] KEDLINE=88271329; PubMed-2455636; MAUTENT FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-2455636; MAUTENT FROM N.A., AUD PARTIAL SEQUENCE. "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human anticoagulant protein."; [3] SEQUENCE FROM N.A. MEDLINE=88273202; PubMed=2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; SEQUENCE FROM N.A. "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE=88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; SEQUENCE FROM N.A. NaNB SEQUENCE.	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, SEQUENCE FROM N.A. MEDLINE-881731202; PubMed=2968983; BEUT J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8817302; PubMed=2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; FubMed=2964863; Funary structure of human placental anticoagulant protein."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", SEQUENCE FROM N.A. MEDLINE-8815378; PubMed=2964863; Funary structure of human placental anticoagulant protein."; Frimary Structure of human placental anticoagulant protein.";	NCBL_TaxID=9606; SQUENCE FROM N.A. MEDLINE-8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EMEDLINE-88271329; PubMed=2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cal+dependent phospholiphid binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SBOUENCE FROM N.A. MEDLINE-88273202; PubMed=2968983; Peplinsky R.B. Tizard R., Matlner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholiphid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:88163463; PubMed=2964861; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:88178807-8992(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-8839278; PubMed=2963810;	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; "Primary Structure of human placental anticoagulant protein.";	NCBL_TaxID=9606; SQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EMEDLINE-88271329; PubMed=2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human pacental."; Bur. J. Blochem. 174:585-592(1988). Eur. J. Blochem. 174:585-592(1988). MEDLINE-88273202; PubMed=296893; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SGUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frianty Structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092.1087.	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234455; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed=4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein.*; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed=2968983; MEDLINE-883500 C., Frey A.Z., Walliner B.P.; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessisto C., Frey A.Z., Walliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.*; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; pubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein.";
NCDI_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8824495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant proct and (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; [3] STATOWA C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; [4] MEDLINE-88273202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; MEDLINE-8813202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; MEDLINE-88163463; PubMed-2968983; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; MEDLINE-88139278; PubMed-2953810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., MEDLINE-88139278; PubMed-2953810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Miller M., Marko H., Hirata M., Miyata T., Miller M., Mi	NCIL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8824495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant proct and (PP4): homology with the lipocortin family."; Proc. Nall. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] KEDLINE=88271329; PubMed-2455636; MAUTENT FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-2455636; MAUTENT FROM N.A., AUD PARTIAL SEQUENCE. "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human anticoagulant protein."; [3] SEQUENCE FROM N.A. MEDLINE=88273202; PubMed=2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; SEQUENCE FROM N.A. "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE=88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; SEQUENCE FROM N.A. NaNB SEQUENCE.	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, SEQUENCE FROM N.A. MEDLINE-881731202; PubMed=2968983; BEUT J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8817302; PubMed=2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; FubMed=2964863; Funary structure of human placental anticoagulant protein."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", SEQUENCE FROM N.A. MEDLINE-8815378; PubMed=2964863; Funary structure of human placental anticoagulant protein."; Frimary Structure of human placental anticoagulant protein.";	NCBL_TaxID=9606; SQUENCE FROM N.A. MEDLINE-8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EMEDLINE-88271329; PubMed=2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cal+dependent phospholiphid binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SBOUENCE FROM N.A. MEDLINE-88273202; PubMed=2968983; Peplinsky R.B. Tizard R., Matlner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholiphid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:88163463; PubMed=2964861; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:88178807-8992(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-8839278; PubMed=2963810;	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; "Primary Structure of human placental anticoagulant protein.";	NCBL_TaxID=9606; SQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EMEDLINE-88271329; PubMed=2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human pacental."; Bur. J. Blochem. 174:585-592(1988). Eur. J. Blochem. 174:585-592(1988). MEDLINE-88273202; PubMed=296893; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SGUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frianty Structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092.1087.	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234455; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed=4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein.*; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed=2968983; MEDLINE-883500 C., Frey A.Z., Walliner B.P.; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessisto C., Frey A.Z., Walliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.*; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; pubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein.";
NCDI_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8824495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant proct and (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; [3] STATOWA C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; [4] MEDLINE-88273202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; MEDLINE-8813202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; MEDLINE-88163463; PubMed-2968983; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; MEDLINE-88139278; PubMed-2953810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., MEDLINE-88139278; PubMed-2953810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Miller M., Marko H., Hirata M., Miyata T., Miller M., Mi	NCIL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8824495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant proct and (PP4): homology with the lipocortin family."; Proc. Nall. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] KEDLINE=88271329; PubMed-2455636; MAUTENT FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-2455636; MAUTENT FROM N.A., AUD PARTIAL SEQUENCE. "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human anticoagulant protein."; [3] SEQUENCE FROM N.A. MEDLINE=88273202; PubMed=2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; SEQUENCE FROM N.A. "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE=88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; SEQUENCE FROM N.A. NaNB SEQUENCE.	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, SEQUENCE FROM N.A. MEDLINE-881731202; PubMed=2968983; BEUT J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8817302; PubMed=2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; FubMed=2964863; Funary structure of human placental anticoagulant protein."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", SEQUENCE FROM N.A. MEDLINE-8815378; PubMed=2964863; Funary structure of human placental anticoagulant protein."; Frimary Structure of human placental anticoagulant protein.";	NCBL_TaxID=9606; SQUENCE FROM N.A. MEDLINE-8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholiphid binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B. Tizard R., Matlner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholiphid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:88178807-8992(1987). [5] SEQUENCE FROM N.A. MEDLINE-881839278; PubMed-2963810;	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; "Primary Structure of human placental anticoagulant protein.";	NCBL_TaxID=9606; SQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EMEDLINE-88271329; PubMed=2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human pacental."; Bur. J. Blochem. 174:585-592(1988). Eur. J. Blochem. 174:585-592(1988). MEDLINE-88273202; PubMed=296893; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SGUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frianty Structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092.1087.	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234455; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed=4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein.*; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed=2968983; MEDLINE-883500 C., Frey A.Z., Walliner B.P.; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessisto C., Frey A.Z., Walliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.*; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; pubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein.";
NCDI_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8824495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant proct and (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; [3] STATOWA C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; [4] MEDLINE-88273202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; MEDLINE-8813202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; MEDLINE-88163463; PubMed-2968983; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; MEDLINE-88139278; PubMed-2953810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., MEDLINE-88139278; PubMed-2953810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Miller M., Marko H., Hirata M., Miyata T., Miller M., Mi	NCIL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8824495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant proct and (PP4): homology with the lipocortin family."; Proc. Nall. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] KEDLINE=88271329; PubMed-2455636; MAUTENT FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-2455636; MAUTENT FROM N.A., AUD PARTIAL SEQUENCE. "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human anticoagulant protein."; [3] SEQUENCE FROM N.A. MEDLINE=88273202; PubMed=2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; SEQUENCE FROM N.A. "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE=88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; SEQUENCE FROM N.A. NaNB SEQUENCE.	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, SEQUENCE FROM N.A. MEDLINE-881731202; PubMed=2968983; BEUT J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8817302; PubMed=2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; FubMed=2964863; Funary structure of human placental anticoagulant protein."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", SEQUENCE FROM N.A. MEDLINE-8815378; PubMed=2964863; Funary structure of human placental anticoagulant protein."; Frimary Structure of human placental anticoagulant protein.";	NCBL_TaxID=9606; SQUENCE FROM N.A. MEDLINE-8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholiphid binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B. Tizard R., Matlner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholiphid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:88178807-8992(1987). [5] SEQUENCE FROM N.A. MEDLINE-881839278; PubMed-2963810;	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; "Primary Structure of human placental anticoagulant protein.";	NCBL_TaxID=9606; SQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EMEDLINE-88271329; PubMed=2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human pacental."; Bur. J. Blochem. 174:585-592(1988). Eur. J. Blochem. 174:585-592(1988). MEDLINE-88273202; PubMed=296893; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SGUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frianty Structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092.1087.	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234455; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed=4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein.*; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed=2968983; MEDLINE-883500 C., Frey A.Z., Walliner B.P.; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessisto C., Frey A.Z., Walliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.*; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; pubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein.";
NCIL_TAXID=9606; SEQUENCE FROM N.A. MEDLINE=8824495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant proct in (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T MEDLINE-88273202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; MEDLINE-8813203; PubMed-2968983; Five distinct calchum and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; MEDLINE-88139278; PubMed-2953810; Iwasaki A., Suda M., Makoo H., Magoya T., Saino Y., Arai K., Miscouchi T., Shariaki H., Hirata M., Miyata T., Miscouchi T., Shariaki H., Hirata M., Miyata T., Miscouchi W. Miscouchi H., Miscouchi H., Miscouchi Miscouchi Miscouchi Miscouchi H., Miscouchi Miscouchi H., Miscouchi	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234495: PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FORY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimaty structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimaty structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furakoshi T., McMullen P.A., And B.DUBNOJ H., Nakao	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; pubMed=4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein.*; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88173202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Fundary structure of human placental anticoagulant protein."; "Five distinct calcium and phospholipid binding protein."; Five distinct calcium and phospholipid succession of the second suc	NCBL_TAXID=9606; SEQUENCE FROM N.A. MEDLINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Calening and expression of cDNA for human vascular anticoagulant, a Calening and expression of CDNA for human vascular stricoagulant, a Calening and expression of CDNA for human vascular stricoagulant, a Fur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B. Tizard R., Mathner B.P.; Peplinsky R.B. Tizard R., Mathner B.P.; Fight distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:88163-8032(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88339278; PubMed-2963810;	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=68234455; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8813202; PubMed=2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen anticoagulant protein."; Fulachemistry 26:8087-8092(1987).	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE-8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] UENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Lioning and expression of CDNA for human protein."; Bur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frianty Structure of human placental anticoagulant protein."; Hochemistry 26:8087-80921087.	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-8828500 C., Frey A.Z., Watlaner B.P.; Hessakon C., Frey A.Z., Watlaner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
NCIL_TAXID=9606; SEQUENCE FROM N.A. MEDLINE=8824495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant proct in (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T MEDLINE-88273202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; MEDLINE-8813203; PubMed-2968983; Five distinct calchum and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; MEDLINE-88139278; PubMed-2953810; Iwasaki A., Suda M., Makoo H., Magoya T., Saino Y., Arai K., Miscouchi T., Shariaki H., Hirata M., Miyata T., Miscouchi T., Shariaki H., Hirata M., Miyata T., Miscouchi W. Miscouchi H., Miscouchi H., Miscouchi Miscouchi Miscouchi Miscouchi H., Miscouchi Miscouchi H., Miscouchi	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234495: PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FORY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimaty structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimaty structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furakoshi T., McMullen P.A., And B.DUBNOJ H., Nakao	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; pubMed=4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein.*; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88173202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Fundary structure of human placental anticoagulant protein."; "Five distinct calcium and phospholipid binding protein."; Five distinct calcium and phospholipid succession of the second suc	NCBL_TAXID=9606; SEQUENCE FROM N.A. MEDLINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Calening and expression of cDNA for human vascular anticoagulant, a Calening and expression of CDNA for human vascular stricoagulant, a Calening and expression of CDNA for human vascular stricoagulant, a Fur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B. Tizard R., Mathner B.P.; Peplinsky R.B. Tizard R., Mathner B.P.; Fight distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:88163-8032(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88339278; PubMed-2963810;	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=68234455; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8813202; PubMed=2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen anticoagulant protein."; Fulachemistry 26:8087-8092(1987).	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE-8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] UENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Lioning and expression of CDNA for human protein."; Bur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frianty Structure of human placental anticoagulant protein."; Hochemistry 26:8087-80921087.	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-8828500 C., Frey A.Z., Watlaner B.P.; Hessakon C., Frey A.Z., Watlaner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
NCIL_TAXID=9606; SEQUENCE FROM N.A. MEDLINE=8824495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant proct in (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T MEDLINE-88273202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; MEDLINE-8813203; PubMed-2968983; Five distinct calchum and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; MEDLINE-88139278; PubMed-2953810; Iwasaki A., Suda M., Makoo H., Magoya T., Saino Y., Arai K., Miscouchi T., Shariaki H., Hirata M., Miyata T., Miscouchi T., Shariaki H., Hirata M., Miyata T., Miscouchi W. Miscouchi H., Miscouchi H., Miscouchi Miscouchi Miscouchi Miscouchi H., Miscouchi Miscouchi H., Miscouchi	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234495: PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FORY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimaty structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimaty structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furakoshi T., McMullen P.A., And B.DUBNOJ H., Nakao	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; pubMed=4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein.*; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88173202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Fundary structure of human placental anticoagulant protein."; "Five distinct calcium and phospholipid binding protein."; Five distinct calcium and phospholipid succession of the second suc	NCBL_TAXID=9606; SEQUENCE FROM N.A. MEDLINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Calening and expression of cDNA for human vascular anticoagulant, a Calening and expression of CDNA for human vascular stricoagulant, a Calening and expression of CDNA for human vascular stricoagulant, a Fur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B. Tizard R., Mathner B.P.; Peplinsky R.B. Tizard R., Mathner B.P.; Fight distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:88163-8032(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88339278; PubMed-2963810;	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=68234455; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8813202; PubMed=2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen anticoagulant protein."; Fulachemistry 26:8087-8092(1987).	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE-8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] UENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Lioning and expression of CDNA for human protein."; Bur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frianty Structure of human placental anticoagulant protein."; Hochemistry 26:8087-80921087.	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-8828500 C., Frey A.Z., Watlaner B.P.; Hessakon C., Frey A.Z., Watlaner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
NCIL_TAXID=9606; SEQUENCE FROM N.A. MEDLINE=8824495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant proct in (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S. A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T MEDLINE-88273202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; MEDLINE-8813203; PubMed-2968983; Five distinct calchum and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; MEDLINE-88139278; PubMed-2953810; Iwasaki A., Suda M., Makoo H., Magoya T., Saino Y., Arai K., Miscouchi T., Shariaki H., Hirata M., Miyata T., Miscouchi T., Shariaki H., Hirata M., Miyata T., Miscouchi W. Miscouchi H., Miscouchi H., Miscouchi Miscouchi Miscouchi Miscouchi H., Miscouchi Miscouchi H., Miscouchi	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234495: PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FORY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimaty structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimaty structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furakoshi T., McMullen P.A., And B.DUBNOJ H., Nakao	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; pubMed=4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein.*; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88173202; PubMed=2968983; MEDLINE-88173202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Fundary structure of human placental anticoagulant protein."; "Five distinct calcium and phospholipid anticoagulant protein."; Frive distinct calcium and phospholipid shading protein."; SEQUENCE FROM N.A. MEDLINE-88193278; PubMed=2964863; Fundary structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed=2963810; MEDLINE-8813	NCBL_TAXID=9606; SEQUENCE FROM N.A. MEDLINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Calening and expression of cDNA for human vascular anticoagulant, a Calening and expression of CDNA for human vascular stricoagulant, a Calening and expression of CDNA for human vascular stricoagulant, a Fur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B. Tizard R., Mathner B.P.; Peplinsky R.B. Tizard R., Mathner B.P.; Fight distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:88163-8032(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88339278; PubMed-2963810;	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=68234455; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8813202; PubMed=2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen anticoagulant protein."; Fulachemistry 26:8087-8092(1987).	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE-8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] UENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Lioning and expression of CDNA for human protein."; Bur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frianty Structure of human placental anticoagulant protein."; Hochemistry 26:8087-80921087.	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-8828500 C., Frey A.Z., Watlaner B.P.; Hessakon C., Frey A.Z., Watlaner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
NCEL_TAXID=9606; SEQUENCE FROM N.A. MEDLINE=8824495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant proct in (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1980). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; CDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [3] SIGNORINE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pephnsky R.B. 71zard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Wallner B.P.; Sinclair L. Salint Lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88153278; PubMed-2964863; Fundachistry Structure of human placental anticoagulant protein."; "Primary Structure of human placental anticoagulant protein."; MEDLINE-88139278; PubMed-2953810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Matal M., Matal H., Hirata M., Miyata T., Mizoguchi H., Misoguchi H., Hirata M., Miyata T., Mizoguchi H., Miller M., Miyata H., Miller M., Miyata T., Mizoguchi H., Miller M., Misch	NCBI_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURER-FORY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular shier I. SEQUENCE FROM N.A. "SEQUENCE FROM N.A. Wattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow B.P., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-8815378; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nakao H., Saino Y., Arai K.,	NCBI_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed=4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Fundary structure of human placental anticoagulant protein."; "Five distinct calcium and phospholipid binding protein."; Five distinct calcium and phospholipid structure of human placental anticoagulant protein."; Frimary structure of human placental anticoagulant protein."; Frimary Structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed=2963810; MEDLINE-88139278; PubMed=2963810; MEDLINE-88139278; PubMed=2963810; MEDLINE-88139278; PubMed=2963810; MEDLINE-88139278; PubMed=2963810; MEDLINE-88139278; PubMed=2963810;	NCBI_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=68234455; PubMed=2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE=88273202; PubMed=2968983; Pepinsky R.B. Tizard R., Mathaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Flye distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE=88163463; PubMed=2964863; Funaxcoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:88167-8892(1987). [5] SEQUENCE FROM N.A. MEDLINE=881839278; PubMed=2964861;	NCBI_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed=4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88173202; PubMed=2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; FubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fullochemistry 26:8087-8092(1987).	NCBI_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; [2] EDGENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed=2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Stratowa C., Hauptmann R.; "It alochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE=88273202; PubMed=296898; Peplansky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frinary structure of human placental anticoagulant protein."; Horhemistry 26:8087-809210987.	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessiston C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein.";
NCBL_TAXID=9606; SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MARTER-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of CDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; EUT. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pephnsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Trey A.Z., Wallner B.P.; SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Handrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; "Frimary Structure of human placental anticoagulant protein.", "MEDLINE-BRIB3278; PubMed-2953810; "MEDLINE-BRIB3278; PubMed-	NCBL_TAXID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAULET-FROM I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Huuptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular shier J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8007-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-8815378; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88153278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed=2455636; MAUER-FCGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinacy Structure of human placental anticoagulant protein.";	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Flye distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funaxcoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; #Filmary structure of human placental anticoagulant protein."; Biochemistry 26:88139278; PubMed=2963810; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed=2963810;	NCBL_TaxID=9606; SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 83:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed-2968983; MEDLINE-88373202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fullochemistry 26:8087-8092(1987).	NCBL_TaxID=9606; [13] SEQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed=2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Linchem 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed=296898; Peplinsky R.B. Tizard R., Matliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Balol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frianty Structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092(1987).	NCBL_TaxID=9606; [1]1 SEQUENCE FROM N.A. MEDILINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAUCET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesskon C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein.";
NCBL_TAXID=9006; SEQUENCE FROM N.A. REDINEWE89234495; PubMed=2967495; MEDLINE=80334495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of CDNA encoding human placental anticoagulant proct in (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-80271329; PubMed-2455636; Maurer-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of CDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:885-592(1988). [3] SEQUENCE FROM N.A., Mallner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Wallner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Wallner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Wallner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Wallner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Wallner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Wallner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Wallner B.P.; Sinclair L.K., Miller G.T Browning J. Linedickson L.E., McMullen B.A., Fujikawa K.; Fujikawa K.; Fujimay Structure of human placental anticoagulant protein."; Frimay A. S., Mada M., Nakoo H., Nagoya T., Saino Y., Arai K., Miller M., Nakoo H., Nagoya T., Saino Y., Arai K., Miller M., Nakoo H., Nagoya T., Saino Y., Arai K., Miller M., Nakoo H., Magoya T., Miller M., Mada H., Miller M., Miller M., Miller M., Miller M., Mi	NCBL_TAXID=9606; SEQUENCE FROM N.A. MEDILINE=88234495; bubmed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FROM J., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann P., "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+dependent phospholipid-binding protein."; SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8007-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8007-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	NCBL_TaxID=9506; [1] SEQUENCE FROM N.A. MEDLINE=88234495; Pubmed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hautmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinach Structure of human placental anticoagulant protein."; Frinary 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963810;	NCBL_TaxID=9606; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Prot. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+dependent phospholipid-binding protein.*; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE=88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Fire district calcium and phospholipid binding proteins share homology with lipocortin I.*; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE=88163463; PubMed=2964863; Funaxcoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein.*; Biochemistry 26:881780789-10811(1987). [5] SEQUENCE FROM N.A. MEDLINE=881839278; PubMed=2964861; SEQUENCE FROM N.A. MEDLINE=88163463; PubMed=2964863; SEQUENCE FROM N.A. MEDLINE=88163463; SEQUENCE FROM N.A. MEDLINE=881634663; SEQUENCE FROM N.A. MEDLINE=88163478616	NCBL_TaxID=9506; SEQUENCE FROM N.A. MEDILINE=88234495; Pubmed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed=2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88373202; PubMed=2968983; MEDLINE-88173202; PubMed=2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fullochemistry 26:8087-8092(1987).	NCBL_TaxID=9506; [1] SEQUENCE FROM N.A. MEDLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Stratcwa C., Hauptmann R.; "Cloning and expression of CDNA for human jostein."; SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; Pepinsky R.B. Tizard R., Matlner B.P.; Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frianty Structure of human placental anticoagulant protein."; Hochemistry 26:8087-809211987.	NCBL_TaxID=9506; [1] SEQUENCE FROM N.A. MEDLINE=88234495; bubmed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein.*; Eur J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; pubMed-2968983; Peptinsky R.B., Tizard R., Mataliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessiston C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.*; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrick of human placental anticoagulant protein.*;
NCBL_TAXID=9006; NCBL_TAXID=9006; (1) SEQUENCE FROM N.A. Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAMINET-FORY I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a cal-dependent phospholipid-binding protein."; Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a cal-dependent phospholipid-binding protein."; Stratowa C., Hauptmann R.; SCHOENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE RROM I.A. SEQUENCE	NCBL_TAXID=9006; SEQUENCE FROM N.A. MEDITAXID=9006; SEQUENCE FROM N.A. MEDITATE-88234499; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAULE-FROM J., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8007-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2964803; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8007-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2964803; Funakoshi A., Suda M., Nakao H., Nasao H., Saino Y., Arai K.,	NCBL_TAXID=9006; SEQUENCE FROM N.A. MEDILINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Froy A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Fundard-2964863; Fundakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein."; Frinary 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Fundary Structure of human placental anticoagulant protein."; Frinary 26:8087-8092(1987).	NCBL_TAXID=9006; [1] SEQUENCE FROM N.A. MEDLINE=88234495; bubmed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratcoa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; pubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:881780789-10811, [5] SEQUENCE FROM N.A. MEDLINE-881839278; PubMed-2263810; SEQUENCE FROM N.A., AND SEQUENCE.	NCBL_TAXID=9006; [1] SEQUENCE FROM N.A. MEDILINE=88234495; bubmed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8873202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fulachemistry 26:8087-8092(1987).	NCBL_TAXID=9006; [1] SEQUENCE FROM N.A. MEDILINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; Protein (PP4): homology with the lipocortin family.*; [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDILINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholiphid-binding protein.*; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; Pepinsky R.B. Tizard R., Mathaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholiphid binding proteins share homology with lipocortin I.*; J. Blol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frankoshi T., Hendrickson L.E.) Frankoshi T., Hendrickson L.E.)	NCBL_TAXID=9006; [1] SEQUENCE FROM N.A. MEDLINE=88234495; bubmed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauthmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; pubMed-2968983; Pepinsky R.B., Tizard R., Mataliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hessbach C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrick of human placental anticoagulant protein.";
NCBL_TAXID=9000; NCBL_TAXID=9000; SEQUENCE FROM N.A. Kuepper H.; Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-FOOTY I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R. Schelling protein."; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:865-592(1988). [3] Eur. J., Enchen. 174:865-592(1988). [3] Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Wallner B.P.; SEQUENCE FROM N.A. SEDUENCE FROM N.A. SEQUENCE FROM N.A.	NCBL_TAXID=9006; SEQUENCE FROM N.A. MEDITAE.48234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAULE-FROM J., Reutelingsperger C.P.M., Pieters J., Bodo G., Strattowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A., MAILINE B.P.; Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P.; Rayliner Galstinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8007-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2964803; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8007-8092(1987). [5] MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nakao	NCBL_TAXID=9006; SEQUENCE FROM N.A. MEDILNE=88234495: PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (Priv): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND FARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauthmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8827302; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessiston C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share sequence from N.A. MEDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Frimary Structure of human placental anticoagulant protein.";	NCBL_TRAXLD=9006; SEQUENCE FROM N.A. MEDILINE=88234495; bubmed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Fur J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five district calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). Kenakoshi T., Handrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:881780789(1987). SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88339278; PubMed-2263810;	NCBL_TAXID=9006; SEQUENCE FROM N.A. MEDILNE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FCGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	NCBL_TRAXID=9006; [1] SEQUENCE FROM N.A. MEDLINE=88234495; Pubmed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Bur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8827322; PubMed-296898; MEDLINE-8827322; PubMed-296898; MEDLINE-8827322; PubMed-296898; MEDLINE-ROW N.A. Hession C., Frey A.Z., Wallner B.P.; Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Trive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Punakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frianry Structure of human placental anticoagulant protein."; Hochemistry 26:8087-809210987.	NCBL_TRXLD=9006; [13] SEQUENCE FROM N.A. MEDILINE=88234495; bubmed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. US.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed=2455636; MAURET-FCGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauthmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a Stratowa C., Hauthmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE=88273202; pubMed=2968983; Peptinsky R.B., Tizard R., Mataliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesskon C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE=8813463; PubMed=2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frunakoshi I., Hendricksof human placental anticoagulant protein.";
NCBL_IGAXID=9000; SEQUENCE FROM N.A. MCBLINE=88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant Proct natl. Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed=2455636; Maurer-FOGY I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R. SEQUENCE. "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein."; Eur. J. Biochem. 174:865-592(1988). [3] SEQUENCE FROM N.A., Mallner B.P.; SEQUENCE FROM N.A., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share Jo. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A., Nallner B.P.; "Five distinct calcium and phospholipid binding proteins share Jo. Biol. Chem. 263:10799-10811(1988). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; "Frimary 2018087-8092(1987). "Frimary 2018087-8092(1987).	NCBL_TAXID=9000; SEQUENCE FROM N.A. MEDITAXID=9000; SEQUENCE FROM N.A. MEDITACCETIZATION Of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAUGET-FROM J., Reutalingsperger C.P.M., Pieters J., Bodo G., Strattowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88271320; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8007-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8007-8092(1987). [5] Massaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	NUEL TAXILE 9000; SEQUENCE FROM N.A. MEDILINE -88234495; DubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauthmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mataliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesskoto C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88153463; PubMed-2964863; Funakchine-88163463; PubMed-2964863; Funakchine-88163463; PubMed-2964863; Funakchine-88183463; PubMed-2964863; Funakchine-88183478; PubMed-2964863; Funakchine-88183478; PubMed-2964863; Funakchine-88183478; PubMed-2964863; Funakchine-88183478; PubMed-2963810; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-881839778; PubMed-2963810; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-881839778; PubMed-2963810; SEQUENCE FROM N.A., AND SEQUENCE.	NCBL_TRAXID=9000; [1] SEQUENCE FROM N.A. MEDLINE=88234499; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed=2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE=88273202; PubMed=2968983; Pepinsky R.B. Tizard R., Matthan B.P.; Frey district calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE=88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:88167-8892(1987). [5] SEQUENCE FROM N.A. MEDLINE=88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8817-8892(1987). SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE=881839278; PubMed=2963810;	NCBL_TAXID=9000; [1] SEQUENCE FROM N.A. MEDILIBE.88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. US.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; PubMed-2964863; Fundary structure of human placental anticoagulant protein."; Friand Structure of human placental anticoagulant protein."; Friand Structure of human placental anticoagulant protein.";	NCBL_TAXID=9000; SEQUENCE FROM N.A. MEDITIME_88234495; bubMed=2967495; SEQUENCE FROM N.A. MEDITIME_88234495; bubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed=2455636; MAULET-FROM J., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed=2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Trey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] Elol. Chem. 263:10799-10811(1988). REDLINE-88163463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Prinary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092.1087).	NCBL_TAXID=9000; [1] SEQUENCE FROM N.A. MEDINE=88234495; bubmed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE=88271329; PubMed=2455636; MAURET-FORY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a cal-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed=2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesskon C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed=2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrick of human placental anticoagulant protein.";
WEDLINE-80134495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4); homology with the lipocortin family.*; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed=2455636; Maurer-Footy I., Rettellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R. Conning and expression of cDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein.*; Cloning and expression of cDNA for human vascular anticoagulant, a SEQUENCE FROM N.A. Mallner B. P. SCOUENCE FROM N.A. Mallner B. P. SEQUENCE FROM T., Chow E.P., Burne C., Huang KS., Pratt D., Machter L. Hession C., Frey A.Z., Wallner B. P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A., AND SEQUENCE Browning J. Hendrickson L. E., McMullen B.A., Fujikawa K.; Fuinary structure of human placental anticoagulant protein."; "Frimary A. Salos P. Moscolence PROM N.A. AND SEQUENCE PROM N.A. AND SEQUENCE N.A. A.	MEDLINE-88234495; DubMed-2967495; SEQUENCE FROM N.A. MEDLINE-88234495; DubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A., Matlant B.P.; Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Frey A.Z., Wallner B.P.; Browning J.L., Chow B.P.; Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Blol. Chem. 263:10799-10811(1988). [4] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.", Blochemistry 26:8007-8092(20810). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.", Blochemistry 26:8007-8092(20810). [5] Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	NUEL_LAXILE_SOUGE SEQUENCE FROM N.A. MEDIINE_88234495; DubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE_88271329; PubMed=2455636; MAURET-FORY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauthmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE_88273202; PubMed=2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE=8813463; PubMed=2964863; Fundary structure of human placental anticoagulant protein."; "Frimary Structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE=88139278; PubMed=2963810; MEDLINE=88139278; PubMed=2963810;	NEBLINATION N.A. MEDILINE-88234495; Dubmed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8873202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattalano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "I've distrinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Timakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:88154863; PubMed-2964861; SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; SEQUENCE FROM N.A. MEDLINE-8816367-8992(1987). SEQUENCE FROM N.A. MEDLINE-8816367-8992(1987). SEQUENCE FROM N.A. MEDLINE-8816367-8992(1987).	Use Comparison of the control of	NEDLINE-88234495; MEDLINE-88234495; MEDLINE-88231329; MEDLINE-88231329; MEDLINE-88271329; MEDLINE-88271320; MEDLINE-87271320; MEDLINE-87271320; MEDLINE-871220; MEDLINE-871220	NEDITIONALY SOURCE FROM N.A. MEDITIONALY SOURCE FROM N.A. MEDITIONE 88234495; DubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Foyy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pubmed C., Huang KS., Pratt D., Wachter L. Hesskon C., Frey A.Z., Walliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Bool. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi I., Hendrick of human placental anticoagulant protein.";
MCBLINE-80134495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Chracterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-FROGY I., Rettellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann & Ca2+dependent phospholipid-binding protein."; Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein."; Four J. Biochem. 174:565-592(1988). [3] Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T SEOUENCE FROM N.A. SEQUENCE FROM N.A. Malhar B.P.; Furnet D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share benonlogy with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. AND SEQUENCE HEDDLINE-88139278; PubMed-2953810; IWASABA H., Bida M., Nakao H., Hirata M., Miyata T., Mixoquchi J. Saino Y., Arai K., Mixian M., Miyata H., Hirata M., Miyata T., And M., AND SEQUENCE H. A. SAINO Y. A. AND SEQUENCE H. A. SAINO Y. A. AND SEQUENCE H. A. SAINO Y. A. AND SEQUENCE H. A. SAINO	PEDLINE-88234495; PubMed-2967495; Rebermann H., Lottspeich F., MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Haung KS., Pratt D., Wachter L. Browning J.L., Chow B.P., Burne C., Haung KS., Pratt D., Wachter L. Hesslon C., Trey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blool. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8007-8092(1987). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8007-8092(20810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	PEDLENCE FROM N.A. MEDLINE-88234495; DibMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauter-Foyy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Punded C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesskon C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Fundary structure of human placental anticoagulant protein."; Frimary Structure of humbed-2963810; Fundary Structure of humbed-2963810; Fundary Structure of human placental anticoagulant protein."; Frimary Structure of human placental anticoagulant protein."; Frimary Structure of humbed-2963810; Fundary Structure of humbed-2963810; Fundary Structure of human placental anticoagulant protein.";	PEDLINE-88234495; Debmed-2967495; SEQUENCE FROM N.A. MEDLINE-88234495; Debmed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PH4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. US.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Further B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein."; SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	DEDUCE FROM N.A. MEDLINE-88234495; DubMed-2967495; Gebermann H., Lottspeich F., Kuepper H.; Rubitaracterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Foyy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a cal-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Mataliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Mataliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Walther B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; PubMed-2964863; Fundary structure of human placental anticoagulant protein."; Frimary structure of human placental anticoagulant protein."; Frimary structure of human placental anticoagulant protein.";	13 SEQUENCE FROM N.A. MADE MJ., Bohn H., Loebermann H., Lottspeich F., MEDLINE-88234495; DubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDINE-88271329; PubMed-2455636; Matter-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R., "Cloning and expression of cDNA for human vascular anticoagulant, a Caz+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Mattaliano R.J., Sinclair L.K., Mallen B.P.; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Mallen B.P.; Rive distinct calcium and phospholipid binding proteins share homology with lipocortin I.", "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", "J. Blol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen Janticoagulant protein.", "Frinal prohemistry 26:8087-809211987).	13 SEQUENCE FROM N.A. MEDLINE-88234495; DEBNEGE FROM N.A. MEDLINE-88234495; DEBNEGE FROM N.A. MEDLINE-88234495; DEBNEGE FROM N.A. MEDLINE-88234495; DEBNER H.; Catalogy N. Catalogy With the lipocortin family. Catalogy N. Peters N.A. MEDLINE-88271329; PubMed-2455636; MAURER-FORY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein. Catalogy N. Stratowa C., Mauptmann R.; Catalogy N. Stratowa C., Mauptmann R.; Catalogy N. Catalogy N.
MEDLINE-88134495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). "SQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-245636; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+dependent phospholipid binding protein."; "Cloning and expression of CDNA for human vascular anticoagulant, a SEQUENCE FROM N.A., Mallar B.P.; "Cloning and expression of C. Ma., Pieters J., Bodo G., Stratowa C., Hauptmann R., Mallar B.P.; "Cloning and expression of CDNA for human vascular anticoagulant, a SEQUENCE FROM N.A., Mallar B.P.; "Five distinct calcium and phospholipid binding proteins share hession C., Frey A.Z., Wallhar B.P.; "Five distinct calcium and phospholipid binding proteins share J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A., AND SEQUENCE HUMAN Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; "Frimary and Protein.", Magoguen.	1] SEQUENCE FROM N.A. Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family. Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family. Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family. Calming and expression of cDNA for human vascular anticoagulant, a Calming and expression of cDNA for human vascular anticoagulant, a Calming and expression of cDNA for human vascular anticoagulant, sequence FROM N.A. Mataliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.', The distinct calcium and phospholipid binding proteins share homology with lipocortin I.', The Machieve PROM N.A. Mallner B.P.; Five distinct calcium and phospholipid binding proteins share phonology with standardson L.E., McMullen B.A., Fujikawa K.; Five distinct calcium and phospholipid binding protein. Saguence FROM N.A. Mallner B.B.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein. Siguence FROM N.A., AND SEQUENCE FROM M.A., AND SEQUENCE FROM N.A., AND SEQUENCE FROM M.A., AND SEQU	SEQUENCE FROM N.A. MEDLINE-88234495; bobbed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURER-FORY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular share tur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessiston C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815403; PubMed-2964863; Fundary structure of human placental anticoagulant protein."; "Frimary Structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; "MEDLINE-88139278; PubMed-2963810; "	EDUCINE -88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PPA): homology with the lipocortin family.; Characterization of cDNA encoding human placental anticoagulant protein (PPA): homology with the lipocortin family.; Characterization of CDNA encoding human placental anticoagulant protein (PPA): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratcow C., Hauptmann R.; Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein.; Cloning and expression of CDNA for human vascular anticoagulant, a Bur. J. Bloothem. 174:585-592(1988). SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.; Free distinct calcium and phospholipid binding proteins share homology with lipocortin I.; Fund. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. And SEQUENCE FROM N.A., AND SEQUENCE FROM N.A., AND SEQUENCE FROM N.A., AND SEQUENCE. SEQUENCE FROM N.A., AND SEQUENCE.	SEQUENCE FROM N.A. MEDLINE-88234495; bobbed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FORY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular in the cal-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessiston C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Fundary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	1] SEQUENCE FROM N.A. Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Caracterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family. Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family. Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family. Calming and expression of CDNA for human vascular anticoagulant, sequence FROM N.A., AND PARTIAL SEQUENCE. Sequence FROM N.A., AND PARTIAL SEQUENCE. Calming and expression of CDNA for human vascular anticoagulant, stratowa C., Hauptmann R., Cloning and expression of CDNA for human vascular anticoagulant, sequence FROM N.A. Sequence FROM N.A. Malline B.P.; Eur. J. Blochem. 174:585-592(1988). Sequence FROM N.A. Matallan B.P.; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P.; Matallan B.P.; Pepinsky R.B., Tizard R., Matallan B.B.; Pepinsky R.B., Tizard R., Matallan B.B.; Pepinsky R.B., Tizard R., Matallan B.B.; Pepinsky R.B., Tizard R., Matallan B.B., R., R., Matallan B.B., R., R., R., Matallan B.B., R., R., R., R., R., R., R., Matallan B.B., R., R., R., R., R., R., R., R., R., R	13 SEQUENCE FROM N.A. MEDITIVE-88234495; Debermann H., Lottspeich F., MEDLINE-88234495; DubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Foyy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Boll. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi I., Hendrick of human placental anticoagulant protein.";
MEDLINE-8813445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Grundmann U., Abel KJ., Bohn H., Loebermann Placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Malure F.P., M., Pieters J., Bodo G., Stratowa C., Hauptmann R., Caloning and expression of cDNA for human vascular anticoagulant, a Ca2+ dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, a SEQUENCE FROM N.A., Nabbed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Phomology with lipocortin I."; Fuller EROM N.A. AND SEQUENCE FROM N.B., Thendrickson L.R., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Frimary and McMaco H., Nagoya T., Saino Y., Arai K., Miller M., Nakao H., Nagoya T., Saino Y., A	SEQUENCE FROM N.A. MEDLINE-8023495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-82731329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a Cal-dependent phospholipid-binding protein.; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Matllner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.', J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8007-8092(1987). [5] Funakoshi T., And SEQUENCE MEDLINE-88139278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8007-8092(1987). [5] Funakoshi A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocentin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURER-FROM I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Lochem. 174:585-592(1988). [3] SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessiston C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary Structure of humbed-2964863; Pumbed-19278; PubMed-2963810; "MEDLINE-88139278; PubMed-2963810; "MEDLINE-88139278	SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-8023495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-80271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frie distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Froe distinct calcium and phospholipid binding proteins share homology with lipocortin I."; SEQUENCE FROM N.A., Mallner B.P.; Frimary structure of human placental anticoagulant protein.";	SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURER-FORY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular batcoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a But J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hessiston C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Fundary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	SEQUENCE FROM N. A. SEQUENCE FROM N. A. SEQUENCE FROM N. A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Characterization of cDNA encoding human placental anticoagulant Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratcowa C., Hauptmann R.; Cloning and expression of CDNA for human vascular anticoagulant, a Cal-dependent phospholipid-binding protein."; Cal-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. Matallan B.P.; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Bunne C., Huang KS., Pratt D., Wachter L. Five distinct calcium and phospholipid binding proteins share homology with hippocortin I.", J. Biol. Chem. 263:10799-10811(1988). Eliol. Chem. 263:10799-10811(1988). Pinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson	SEQUENCE FROM N.A. MEDLINE-8823495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAULET-FROM I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Huuptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of the content of the coartened of the coa
### SEQUENCE FROM N.A.	SEQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-8823445; PubMed-2967495; Grundmann U., Abel K.J., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8007-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88153278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	EDURICE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAULE-FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAULE-FROM N.A., AND PARTIAL SEQUENCE. "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a sequence FROM N.A. MEDLINE-88273202; PubMed-2968983; PEDLINE-88273202; PubMed-2968983; PEDLINE-882700 C., Frey A.Z., Walliner B.P.; Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share sequence FROM N.A. MEDLINE-88139436; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Frimary Structure of human placental anticoagulant protein.";	SEQUENCE FROM N.A. MEDLINE-8823445; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8871329; PubMed-245636; MAURET-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blod. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-8815345; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8017-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; REDLINE-88153278; PubMed-2963810;	ESQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAULE-FROM I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a gratement phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesskon C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Fundschill anticoagulant protein."; Frimary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	SEQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-745536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Blol. Chem. 263:10799-10811(1988). [4] Blol. Chem. 263:10799-10811(1988). REDUINE-88153463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frinary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092.1087).	SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; Cloning and expression of CDNA for human vascular anticoagulant, a cazt-dependent phospholipid-binding protein.*; Cloning and expression of CDNA for human vascular anticoagulant, a cazt-dependent phospholipid-binding protein.*; EUT. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; PEPINSKY R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.*; J. Boll. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8818405; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrick of human placental anticoagulant protein.*;
EQUENCE FROM N.A. MEDLINE-8823495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-8821329; PubMed-2455636; MAUCE-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Haughumann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein."; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share boomed to the second sec	[1] SEQUENCE FROM N.A. MEDLINE-8023445; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-80271329; pubMed-245636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:385-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Fre distinct calcium and phospholipid binding proteins share homology with light of them placental anticoagulant protein."; [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Frimary Structure of	[1] SEQUENCE FROM N.A. SEQUENCE GROAN A.A. SEQUENCE GROAN A.A. SEQUENCE GROAN A.A. SEQUENCE TO GENTA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family. Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fooy I., Requelingsperger C.P.M., Pieters J., Bodo G., Stratcowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein.", "Cloning and expression of cDNA for human vascular anticoagulant, a Ga2+-dependent phospholipid-binding protein.", "Cloning and expression of cDNA for human vascular shier Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.D., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.A., Fujikawa K.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Boll. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88139278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; MEDLI	[1] SEQUENCE FROM N.A. MEDLINE-8823445; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURE-FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88171329; PubMed-245636; MAUCHINE-88171329; PubMed-245636; MAUCHINE-88171329; PubMed-296898; Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-296898; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Hang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:88178902(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964810;	[1] SEQUENCE FROM N.A. SEQUENCE GROAN A.A. SEQUENCE GROAN G. Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mather-Froy I., Requelingsperger C.P.M., Pieters J., Bodo G., Strattowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; PEPINSKY R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Fundschill anticoagulant protein."; Frimary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	[1] SEQUENCE FROM N.A. MEDLINE-8823445; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88371329; PubMed-245636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Prinary structure of human placental anticoagulant protein."; "Prinary structure of human placental anticoagulant protein.";	[1] SEQUENCE FROM N.A. MEDLINE-6823445; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] U. Grow E.P., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Sinclair L.K., Miller G.T Frow distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Boll. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frunakoshi T., Hendricke of human placental anticoagulant protein.";
EQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant Froc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. MEDLINE-88271329; PubMed-2455636; MAURE-POGY I., Reutellingsperger C.P.M., Pieters J., Bodo G., MEDLINE-88271329; PubMed-2455636; MAURE-POGY I., Haughtmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein.; Cloning and expression of cDNA for human vascular anticoagulant, Ca2+dependent phospholipid-binding protein.; [3] SEQUENCE FROM N.A. MEDLINE-8827320; PubMed-2968983; MEDLINE-8827320; PubMed-2968983; MEDLINE-8817320; PubMed-2968983; MEDLINE-8817320; PubMed-2968983; MEDLINE-8810780; PubMed-2968989; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I "; Frive distinct calcium and phospholipid binding proteins share chomen 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Frimary Line-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., MEDLINE-88139278; PubMed-2963810; Frincyculi T., Saino Y., Mizoquchi H., Mizata M., Miyata T., Mizoquchi H., Magoya T., Saino Y., Mizoquchi M., Nakao H., Nakao H., Hirata M., Miyata T., Mizoquchi M., Nakao H., Nayaya H., Hirata M., Miyata T., Mizoquchi M., Mara M., Mara M., Marai M., Mizata M., Mizata M., Mizata M., Mizata M., Mizata M., Mizata M., Mizat	EQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-8823445; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). Ed. SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245536; MAURIE-FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245536; MAURIE-FROM N.A. Cad-dependent phospholipid-binding protein."; Cloning and expression of CDNA for human vascular anticoagulant, a Cad-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:385-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipercortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). SEQUENCE FROM N.A. MEDLINE-8815378; PubMed-2963810; Iwassaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Iwassaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	[1] SEQUENCE FROM N.A. MEDLINE-6823445; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-8827322; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Hang E. Sequence FROM N.A. MEDLINE-88132436; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Fuinary structure of human placental anticoagulant protein."; Ferimary St	[1] SEQUENCE FROM N.A. MEDLINE-8823445; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Brimary structure of human placental anticoagulant protein."; Brimary structure of human placental anticoagulant protein."; Brichemistry 26:8817-892(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	[1] SEQUENCE FROM N.A. MEDLINE-6823445; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kueper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauer-Froy I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human yascular anticoagulant, a Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pephnsky R.B., Tizard R., Mataliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Trive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikama L., Fujikama L., Fulikana L., Ful	[1] SEQUENCE FROM N.A. MEDLINE-8823445; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipercortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein.";	[1] SEQUENCE FROM N.A. MEDLINE-6823445; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kueper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8827322; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Sinclair L.K., Miller G.T Frow distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Boll. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frunakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frunakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frunary structure of human placental anticoagulant protein.";
Claim Comparison Comparis	[1] SEQUENCE FROM N.A. MEDIINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDIINE-88271329; PubMed-245636; MAURET-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peppinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8992(1981); Iwassaki A., Suda M., Nakao H., Nasoya T., Saino Y., Arai K.,	[1] SEQUENCE FROM N.A. MEDIINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURE-FOGY I.; Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furnary structure of human placental anticoagulant protein."; Frianty Structure of human placental anticoagulant protein."; Figure From Frianty Structure of human placental anticoagulant protein."; Figure From Frianty Structure of human placental anticoagulant pro	[1] SEQUENCE FROM N.A. MEDIINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245636; MAULE-8271329; PubMed-245636; MAULE-FORM I. SEQUENCE. MEDLINE-88271329; PubMed-296893; Stratowa C., Hauptmann R.; Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pephinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; SEQUENCE FROM N.A. MEDLINE-8816346; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Brimary structure of human placental anticoagulant protein."; Brimary structure of human placental anticoagulant protein."; Biochemistry 26:8813928; PubMed-2963810; SEQUENCE FROM N.A., AND SEQUENCE.	[1] SEQUENCE FROM N.A. MEDIJNE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I.; Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholiphid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Tive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary 26:8087-8092(1987).	[1] SEQUENCE FROM N.A. MEDIINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDIINE-88271329; PubMed-245636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peppinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein.";	[1] SEQUENCE FROM N.A. MEDLINE-8823445; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88183463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
Claim Cartering Carterin	EDUINE-88234495; PubMed-2967495; MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; CDNA for human vascular anticoagulant, a claining and expression of cDNA for human vascular anticoagulant, a claining and expression of cDNA for human vascular anticoagulant, seur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Heaston C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	MEDLINE-88234495; PubMed-2967495; MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGLE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fody I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phosspion of cDNA for human vascular anticoagulant, Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-296483; MEDLINE-88139278; PubMed-29	EQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURE-FROM J. Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). Eur. J. Biochem. 174:585-592(1988). MEDLINE-88273202; PubMed-296893; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Pubmed C., Huang Phospholipid binding proteins share homology with lipocortin I."; Datol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:807-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	EDULINE-88234495; PubMed-2967495; MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENCY. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EMEDLINE-88271329; PubMed-2455636; Maurer-Fody I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; [4] Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; [5] J. Biol. Chem. 263:10799-10811(1988). [6] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	Use	Use Perone N. A.
MEDLINE-88234495; PubMed=2967495; MEDLINE-88234495; PubMed=2967495; Kutudmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kutudmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kutudmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Rupper H.; "Characterization of cDNA encoding human placental anticoagulant proce in (PP4): homology with the libocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Fur J. Blochem. 174:585-592(1988). [3] Feblinsky R.B., Tazard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share bomology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share bomology with lipocortin I."; "Five Hission C., Frey Na.Z., Wallner B.P.; "Five Hission C., Frey Na.Z., Wallner B.P.; "Frimary structure of human placental anticoagulant protein."; "Primary Structure of human placental anticoag	MEDLINE-88234495; PubMed-2967495; MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURE-FROMY I., Reutellngsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pephinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-8815345; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2963810; Iwassaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	MEDLINE-8823495; PubMed-2967495; MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Peptinsky R.B. Tizard R., Matlaner B.P.; Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Primary 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary Structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; PRIMEDLINE-88139278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary 26:8087-8092(1987).	MEDLINE-88234495; PubMed-2967495; MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [3] Eur. J. Biochem. 174:585-592(1988). [4] MEDLINE-8827322; PubMed-296898; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Pubmed C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). KEURKE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:88178902(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	MEDLINE-8823495; PubMed-2967495; MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8813202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	MEDLINE-88234495; PubMed-2967495; MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURE-FOGY I., Reutellngsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a clast-dependent phospholipid.binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Hang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092(1987).	MEDLINE-88234495; PubMed-2967495; MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGLINE-88271339; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein.";
MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel RJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Cundmann U., Abel RJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 83:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pephnsky R.B., Tizard R., Mataliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Frow E.P., Burne C., Huang KS., Pratt D., Machter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Frow E.P., Burne C., Huang proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88163463; FubMed-2964863; Funakosh T., Handrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nayoya T., Saino Y., Arai K., All Sequence From Miyata T., All Suda M., Nakoo H., Nakoya T., Saino Y., All K., All Suda M., Nakoo H., Hirata M., Miyata T., All Suda M., Nakoo H., Hirata M., Miyata T., All Suda M., Nakoo H., Hirata M., Miyata T., All Suda M., Nakoo H., Hirata M., Miyata T., All Suda M., Nakoo H., Hirata M., Miyata T., All Suda M., Nakoo H., Nakoo H	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; [2] ENGINE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [3] Eur. J. Biochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding protein."; "Five distinct calcium and phospholipid binding protein."; SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein.";	MEDLINE-88234495; PubMed-2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-4455636; Maurer-Fegy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8813202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary Structure of human placental anticoagulant protein."; "Frinary 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863	MEDLINE-88234495; PubMed-2967495; Groundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGURCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Peplinsky R.B. Tizard R., Burner C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8802(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-8813928; PubMed-2963810;	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] REDIENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-881232; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; "Primary 26:8087-8092(1987).	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; [2] ENCY NATION S.A. 85:3708-3712(1988). [2] ENCY NATION PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAUREL-FORY I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987).	MEDLINE-88234495; Mede-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Cundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratova C., Hautpmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88132302; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; pubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., Wenullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
SEQUENCE FROM N.A. MEDLINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PH4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. US.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FORY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Statoma C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular shrieting J.L., Chow B.P., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow B.P., Wallner B.P.; Five distinct calcula and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 253:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakosh T., Handrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8028(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nakoya T., Saino Y., Arai K., Chisara V. M., Sada M., Nako H., Hirata M., Miyata T., Chisara V. M., Nako H., Hirata M., Miyata T., Chisara V. M., Nakoya E., Yoshizaki H., Hirata M., Miyata T., Chisara V. M., Nakoya E., Weshizaki H., Hirata M., Miyata T., Ching Miller M. Sada M., Nakoya H., Hirata M., Miyata T., Ching Miller M. Sada M., Nakoya H., Hirata M., Miyata T., Ching Miller M. Sada M., Nakoya H., Hirata M., Miyata T., Ching M. Sequence Rever M. M., Nakoya H., Hirata M., Miyata T., Ching M. Sequence Rever M. M., Nakoya H., Hirata M., Miyata T., Ching M. Sequence Rever M. M., Nakoya T., Saino Y., And K., Ching M. Miller M. M., Nako H., M., Miller M., Nakoya T.,	SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funary structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein."; Prodomer Prodo	SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel RJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 83:7308-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratca C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Further Brochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8813202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein."; Frinary 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson	SEQUENCE FROM N.A. MEDLINE-80234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-80271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-80273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mathaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frey district calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8015463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8017-802(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-801392/8; PubMed-2963810;	SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant Protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 83:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Ca1-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8813202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Princh and Structure of human placental anticoagulant protein.";	SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel RJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] EQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of CDNA for human vascular anticoagulant, a "Cloning J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; Pephinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092(1987).	SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratca C., Hautmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human protein."; [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Matlaner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; [4] SEQUENCE FROM N.A. MEDLINE-8815465; Funakoshi T., Hendrickson L.E. McMullen B.A., Fujikawa K.; Funakoshi T., Hendricke of human placental anticoagulant protein.";
SEQUENCE FROM N.A. MEDITE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FROM J., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of the second of control of control of cDNA for human vascular anticoagulant, a "Cloning and expression of the second of control of control of cDNA for human protein."; [3] ENCARTON N.A. MEDLINE-88173212; PubMed-2968983; Pepinsky R.B., Tizard R., Mathlar B.P.; Stocker L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcula and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 253:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815403; PubMed-2964863; Funakoshi T., Handrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8028(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-8813278; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Phisary A., Suda M., Nakoo H., Hirata M., Miyata T., Phisary A., Suda M., Nakoo H., Hirata M., Miyata T., Phisary S., Suda M., Nakoo H., Hirata M., Miyata T., Phisary S., Suda M., Nakoo H., Hirata M., Miyata T., Phisary S., Suda M., Nakoo H., Hirata M., Miyata T., Phisary S., Suda M., Nakoo H., Hirata M., Miyata T., Phisary S., Suda M., Pall K., Hirata M., Miyata T., Phisary S., Suda M., Pall K., Pa	SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burner C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Brimary structure of human placental anticoagulant protein."; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-3963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (Pt4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, a Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8827302; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funnakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein."; Frinary 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; Funnakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary Structure of human placental anticoagulant protein."; Frinary 26:8087-8092(1987).	SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 83:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Fried district calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8817802(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. MEDLINE-8823232; PubMed-2968983; BEDLINE-8823232; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; "Five distinct calcium and phospholipid binding proteins share should chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primakoshi T., Hendrickson L.E., McMullen B.A., Fujikama structure of human placental anticoagulant protein."; "Frimary 26:8087-8092(1987).	SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Prot. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frunakoshi T., Hendrickson L.E., McMullen B.A., Fujikawi K.; Frunakoshi T., Hendrickson L.E., McMullen B.A., Fujikawi K.;	SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FCGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hessbach C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815465; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frunakoshi I., Hendrickson L.E., McMullen B.A., Fujikama K.; Frunakoshi I., Hendrick of human placental anticoagulant protein.";
SEQUENCE FROM N.A. MEDITNE-88234495; bubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Kuepper H.; Rubaracterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FROY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, s Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 253:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815483; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimaty structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-8813278; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-8813279; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Schister Mizoguchi T., Mandrickan H., Hirata M., Miyata T., Secontal M., Nakoo H., Miyata H., Hirata M., Miyata T., Secontal M., Nakoo H., Miller M., Hirata M., Miyata T., Secontal M., Nakoo H., Miller M., Hirata M., Miyata T., Secontal M., Nakoo H., Miller M., Hirata M., Miyata T., Secontal M., Nakoo H., Miller M., Miyata T., Secontal M., Nakoo H., Nakoo H., Miller M., Miyata T.,	SEQUENCE FROM N.A. MEDITNE-88234495; bubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-2455636; Mauter-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein.*; Fur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.*; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.*; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88139278; PubMed-2964863; Iwasaki A., Suda M., Nakao H., Nakao H., Saino Y., Arai K.,	SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDILINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FCGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Further and expression of cDNA for human vascular anticoagulant, a Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funnakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Frimary Structure of humbed-2964863; Funnakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary Structure of humbed-2964863; Funnakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary Structure of humbed-2964863; Funnakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary Structure of humbed-2964863; Funnakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary Structure of humbed-2964863; Funnak	SEQUENCE FROM N.A. MEDILINE-88234495; bubmed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "I've distrinct calcium and phospholipid binding proteins share homology with lipocortin I.", J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8817-882(1987). [55] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	SEQUENCE FROM N.A. MEDINE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FCGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; "Primary 26:8087-8092(1987).	SEQUENCE FROM N.A. MEDITNE-88234495; bubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.*; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauter-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R., "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein.*; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinary structure of human placental anticoagulant protein.*;	SEQUENCE FROM N.A. MEDITE-88234495; PubMed=2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann N.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hessbach C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
SEQUENCE FROM N.A. MEDLINE-8823495; bubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAULET-FROM T., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A., MAILINER B.P.; Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8816343; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimaty structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-8813278; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Shidan M., Nakao H., Hirata M., Miyata T., Sato E., Yoshizaki H., Hirata M., Miyata T.,	SEQUENCE FROM N.A. MEDLINE-8823495; bubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauer-Feogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Matlanta B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Trey A.Z., Matlanta B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Bloom Sequence FROM N.A. SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. SEQUENCE FROM N.A., AND SEQUENCE. SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964803; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Biochemistry 26:8087-8092(1987). [5] Massaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	SEQUENCE FROM N.A. MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "cloning and expression of cDNA for human vascular anticoagulant, a "Loning and expression of cDNA for human vascular anticoagulant, a Burnetor J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Personing J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary Structure of human placental anticoagulant protein."; Frimary Structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863	SEQUENCE FROM N.A. MEDLINE-8823495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R. "Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Frimary structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein."; Frimary structure o	SEQUENCE FROM N.A. MEDLINE-88234495; bubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FORY I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessbon C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinary Structure of human placental anticoagulant protein."; "Prinary 26:8087-8092(1987).	SEQUENCE FROM N.A. MEDLINE-8823495; bubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Matlaniano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Matlane B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frinary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987).	SEQUENCE FROM N.A. MEDLINE-88234495; bubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular in the cast-dependent phospholipid-binding protein."; Butt. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendricksof human placental anticoagulant protein.";
SEQUENCE FROM N.A. SEQUENCE. SCI. U.S.A. 88:3708-3712(1988). SEQUENCE FROM N.A. SCI. U.S.A. 88:3708-3712(1988). SEQUENCE FROM N.A. SEQUENCE	SEQUENCE FROM N.A. SEQUENCE. SEQUENCE FROM N.A. SEQUENCE SEQUE	SEQUENCE FROM N.A. SEQUENCE TROM Of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family. [2] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; Pepinsky R.B. Tizard R. MELLINE-88273202; PubMed-296898; Pepinsky R.B. Tizard R. MELLINE-88273202; PubMed-296888). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2964863; Pepinsky R.B. SEQUENCE FROM N.A. MEDLINE-8813403; PubMed-2964863; Funakcshi T., Hendrickson L.E. MEDLINE-88139278; PubMed-2964863; Funakcshi T., Hendrickson L.E. MEDLINE-88139278; PubMed-2963810; Funakcyni T. Funakcyni T. Funakcyni T. Funakcyni T. Funakcyn	SEQUENCE FROM N.A. SEQUENCE. SEQUENCE FROM N.A. SEQUENCE SEQUE	SEQUENCE FROM N.A. SEQUENCE. SEQUENCE SEQUENCE SEQUENCE MALLE-88271329; PubMed-2455636; MALLE-FROM N.A. SEQUENCE MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; SEQUENCE SECUENCE SEQUENCE SECUENCE SEQUENCE SEQUE	SEQUENCE FROM N.A. SEQUENCE SEQUENCE FROM N.A. SEQUENCE SEQUEN	SEQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE FROM N.A. SEQUENCE TROM N.A. SEQUENCE TROM Of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family. [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FROM J., RAUGLAINGSPERGE C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R. "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pephisky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
MEDLING-8 RADA N.A. MEDLING-8 RADA N.A. MEDLING-8 RADA N.A. Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245536; MAURIE-7FGGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R. "Cloning and expression of CDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.", "Five distinct calcium and phospholipid binding protein.", "Firmary structure of human placental anticoagulant protein.", "Frimary structure of human placental anticoagulant protein.", Blochemistry 26:8087-8092(1987). [5] Maizoguch H. Sada M., Nakso H., Nakoya T., Saino Y., Arai K., phisaria, A., Suda M., Nakso H., Nakoya T., Saino Y., Arai K., phisaria, Mizoguch H., Nako H., Nakoya T., Saino Y., Arai K., phisaria P., Mizoguch H., Nakoya H., Hirata M., Miyata T., phisary P., Mizoguch H., Nakoya H., Hirata M., Miyata T.,	SEQUENCE FROM N.A. MEDLINE-88234455; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, as ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:385-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815345; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8992(1987). [5] Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8992(1987). [6] MEDLINE-88153278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Brinary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8992(1987). [7] MEDLINE-88153278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Brinary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8992(1987). [8] MEDLINE-88153278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nak	MEDLINE-88234495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, SEQUENCE FROM N.A. [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A., Mathaliano R.J., Sinclair L.K., Miller G.T Proving J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Sinclair L.K., Miller G.T Frow distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; MEDLINE-881	SEQUENCE FROM N.A. MEDLINE-882344455; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, as Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEGOENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Pubmed -296893; Fere distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). Funackoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Brimary structure of human placental anticoagulant protein."; Brimary structure of human placental anticoagulant protein."; Blochemistry 26:807-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauer-Feogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratcwa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [3] Eur. J., Chow E.P., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Boll. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary Structure of human placental anticoagulant protein.";	SEQUENCE FROM N.A. MEDLINE-88234465; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipecortin I."; J. Blol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein.";	MEDLINE-8ROW N.A. MEDDINGE FROM N.A. MEDDINGE FROM N.A. Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8827322; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Lession C., Frey A.Z., Wallner B.P.; Lession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Nachter L. Hession C., Ency A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Nachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Nachter L. Hension Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-882731329; PubMed-245636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, as Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I."; [4] SEQUENCE FROM N.A. SEQUENCE FROM N.A. MEDLINE-8815453: PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] MEDLINE-88139778; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Anderson H., Nasoya T., Saino Y., Anderson H., Nasoya H., Nasoya T., Saino Y., Anderson H., Nasoya T., Sain	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-245536; MAULENE-8271329; PubMed-245536; MAURET-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, as Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Hanng KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Fryte distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., And SEQUENCE MEDLINE-88159278; PubMed-2964863; Funakoshi T., And SEQUENCE MEDLINE-88139278; PubMed-2964863; Funakoshi A., Suda M., Nakao H.,	MEDIINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Forman R.; Toning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Buchem. 174:585-592(1988). SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. Medica Page 1880. [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furanzy structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein."; Perimary structure of human placental anticoagulant protein."; Primary Structure of human placental anticoagulant protein."; Perimary Medical Perimary Structure of human placental anticoagulant protein.	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REDLINE-88271329: pubMed-2455636; MADLINE-88271329: pubMed-245636; MADLINE-88271329: pubMed-245636; MADLINE-88271329: pubMed-245689]. Stratowa C., Hauptmann R.; Cal-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). Eur. J. Biochem. 174:585-592(1988). REDLINE-88273202; PubMed-296893; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:807-8092(1987). SEQUENCE FROM N.A., AND SEQUENCE MEDLINE-88153278; PubMed-2963810;	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). SEQUENCE FROM N.A. AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. 71zard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Tive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary 26:8087-8092(1987).	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REDIINE-88271329; PubMed-245536; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, as Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pephinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frye distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Reinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.;	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; Pubmed-245536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Trey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). 12] REDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cal-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pephinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Fryte distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8078-8092(1987). [5] Fransaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Misaaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Misaaki A., Suda M., Nakoo H., Nakoya T., Saino Y., Arai K., Misaaki A., Suda M., Nakoo H., Nakoya T., Saino Y., Arai K., Misaaki A., Suda M., Nakoo H., Nakoya T., Saino Y., Arai K., Misaaki A., Suda M., Nakoo H., Nakoya T., Saino Y., Arai K., Misaaki A., Suda M., Nakoo H., Nakoya T., Saino Y., Arai K., Misaaki A., Suda M., Nakoo H., Nakoya T., Saino Y., Arai K., Misaaki A., Suda M., Nakoo H., Nakoya T., Saino Y., Arai K., Misaaki A., Suda M., Nakoo H., Nakoya T., Saino Y., Arai K., Misaaki A., Suda M., Nakoo H., Nak	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid.binding protein."; Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-8815345; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Finary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8992(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwassaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGLE FROM N.A., AND PARTILL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fody I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [2] Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963810; [6] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; [7] MEDLINE-88139278; PubMed-2963810;	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutellingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Bur. J. Biochem. 174:585-592(1988). MEDLINE-88273202; PubMed-296898); REDLINE-88273202; PubMed-296898); Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Pubmed C., Frey A.Z., Wallner B.P.; Futher distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Datol. Chem. 263:10799-10811(1988). Kubine-88163463; PubMed-2964863; Futher Structure of human placental anticoagulant protein."; Biochemistry 26:88178902(1987). SEQUENCE FROM N.A., AND SEQUENCE REDURNE-8813928; PubMed-2963810;	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGLE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fody I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [2] Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; [4] Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; [5] J. Biol. Chem. 263:10799-10811(1988). [6] SEQUENCE FROM N.A. MEDLINE-8816363; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	MEDLINE-88234495; PubMed-2967495; Grubmann H., Lottspeich F., Kuepper H.; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). 12] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a clastomy and expression of cDNA for human vascular anticoagulant, a clast-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Heaston C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092(1987).	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGLE FROM N.A., AND PARTILL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Fundacy Structure of human placental anticoagulant protein."; Frimary structure of human placental anticoagulant protein.";
MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutellingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). Eur. J. Biochem. 174:585-592(1988). REDLINE-88273202; PubMed-296893; Pephinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8007807-8092(1987). [5] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Biochemistry 26:807807-8092(1987). [5] Funakoshi T., And SEQUENCE. MEDLINE-88139778; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., And Shidan M., Nakao H., Nagoya T., Saino Y., Arai K., And Shidan M., Nakao H., Nakao H., Hirata M., Miyata T., And Shidan M., Nakao H., Na	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Chemistry 26:8087-8092(1987). [7] Wassaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] Exporter FROM N.A., AND PARTILL SEQUENCE. [2] Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; [3] Burchmen R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; Perimary Structure of human placental anticoagulant protein."; [6] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; T.D. M. M. A. AND SEQUENCE.	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ENGLE FROM N.A., AND PARTILL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; [3] Eur. J. Biochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; True distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8892(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REQUENCE FROM N.A., AND PARTIAL SEQUENCE. [2] Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; [3] Burnomen I. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Fundary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein."; "Primary structure of human placental anticoagulant protein.";	MEDLINE-88234495; PubMed-2967495; Grudmann H., Lottspeich F., Kuepper H.; Grudmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutellingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). Eur. J. Biochem. 174:585-592(1988). MEDLINE-88273202; PubMed-296893; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092(1987).	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (FP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88123202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.";
MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REQUENCE FROM N.A., AND PARTILL SEQUENCE. REDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [3] Biochem. 174:585-592(1988). [4] REDLINE-88273202; PubMed-296898; [5] Pephinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frive distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Sato B. PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Mizouch H., Nasao H., Nagoya T., Saino Y., Arai K., Chisara V. M., Nakao H., Nagoya T., Saino Y., Arai K., Chisara V. M., Nakao H., Nagoya T., Saino Y., Arai K., Chisara V. M., Nakao H., Nasao H., Najoya T., Saino Y., Arai K., Chisara V. M., Nakao H., Nasao H., Najoya T., Saino Y., Arai K., Chisara V. M., Nakao H., Nasao H., Najoya T., Saino Y., Arai K., Chisara V. M., Nakao H., Nakao H., Najoya T., Saino Y., Arai K., Chisara V. M., Nakao H., Nakao H.	MEDLINE-8834495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] ExoUENCE FROM N.A., AND PARTILL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cal-dependent phospholiphid-binding protein."; [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Maller B.P.; Fundrickson L. E., McMullen B.A., Fujikawa K.; Fundrickson L. E., McMullen B.A., Fujikawa K.; Fujikawa M.; Wakao H.; Wayaoya T., Saino Y., Ani K.; Fujikawa K.; Fujikawa K.; Fujikawa M.; Wakao H.; Wakao H.; Wayaya T., Saino Y.	MEDLINE-88234495; PubMed-2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Carundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Caracterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein Cal. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8813202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Primary Structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [2] Bur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Matlner B.P.; Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Pepinsky R.B. Tizard R., Mallner B.P.; The distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8892(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	MEDLINE-88234495; PubMed-2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Calaracterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Tive distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Primary 26:8087-8092(1987).	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant procein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] Exolence FROM N.A., AND PARTILL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fody I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholiphid-binding protein."; [3] Eur. J. Biochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; Pephinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholiphid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092(1987).	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Ruepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PA4): homology with the lipocortin family."; Protein (PA4): homology with the lipocortin family."; Protein (PA4): homology with the lipocortin family."; [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. MEDLINE-88231302; PubMed-2968983; MEDLINE-88131302; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessbach C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
MEDLINE-88234495; PubMed-2967495; Gunndmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.: "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REQUENCE FROM N.A., AND PARTILL SEQUENCE. REDLINE-88271329; PubMed-2455636; MAUREI-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8827322; PubMed-296898; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang With lipocortin I."; [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8078789; PubMed-2963810; [5] Funakoshi T., Sato E. Woshizaki H., Hirata M., Miyata T., Mizaguchi H., Sato E., Yoshizaki H., Hirata M., Miyata T., Chingary M. Mizaguch H., Nasao H., Nasaou	MEDLINE-88234495; PubMed-2967495; Gunndmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; [2] REQUENCE FROM N.A., AND PARTIL SEQUENCE. [2] MAUREL-86271329; PubMed-4455636; MAUREL-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; [3] Biochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funary structure of human placental anticoagulant protein."; Frimary structure of human placenta	MEDLINE-88234495; PubMed-2967495; Gunndmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Cubracterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratova C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-8827302; PubMed-2968983; MEDLINE-8813202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; "Frimary 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary 26:8087-8092(1987). [6] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; THOUSE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	MEDLINE-88234495; Pubmed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Ruepper H.; Robertation of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; [2] REQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein."; [3] REDINE-88273202; PubMed-2968983; PEDINE-88273202; PubMed-2968983; PEDINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mathariano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Fight distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). Kenakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8817802(1987). SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	MEDLINE-88234495; PubMed-2967495; Gunndmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratova C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Furn J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88123202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; Tyre distinct calcium and phospholipid binding proteins share homology with lipocortin 1."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Primary 26:8087-8092(1987).	MEDLINE-88234495; PubMed-2967495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; [3] Biochem. 174:585-592(1988). [4] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296898; Pephinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092(1987).	MEDLINE-88234495; PubMed-2967495; Gundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Cubracterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratoma C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessbon C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815465; PubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frunakoshi I., Hendricken L.E., McMullen B.A., Fujikawa K.; Frunakoshi I., Hendricken L.E., McMullen B.A., Fujikawa K.; Frunakoshi I., Hendricken L.E., McMullen B.A., Fujikawa K.;
MEDLINE-88234495; PubMed-2957495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. US.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURER-FORY I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular shiften I. I. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273222; PubMed-296893; Peplinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 253:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi T., Handrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K., Phisand M., Nakao H., Hirata M., Miyata T., Phisand M., Nakao H., Nakao H., Hirata M., Miyata T., Phisand M., Nakao H., Miller M., Miyata T., Phisand M., Nakao H., Miller M., Miyata T., Phisand M., Nakao H., Miller M., Miller M., Nakao H., Nakao H., Nakao H., Nakao H., Nakao H., Nak	MEDLINE-88234495; PubMed-2957495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burner C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nakao H., Nagoya T., Saino Y., Arai K.,	MEDLINE-88234495; PubMed-2957495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4); homology with the lipocortin family."; [2] MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hautmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Furthe-88273202; PubMed-2968983; MEDLINE-88273202; PubMed-2968983; Peptinsky R.B.; Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hesslon C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Frimary Structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963810;	MEDLINE-88234495; Pubmed-2957495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five district calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8807-8892(1987). [55] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	MEDLINE-88234495; PubMed-2957495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; [2] MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; MEDLINE-8813202; PubMed-2968983; Peptinsky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein."; "Primary 26:8087-8092(1987).	MEDLINE-88234495; PubMed-2957495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-4455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Futanary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092(1987).	MEDLINE-88234495; PubMed-2957495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Protein (PP4): homology with the lipocortin family."; Protein (SP4): homology with the lipocortin family."; Protein (SP4): homology with the lipocortin family."; [2] MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hessbach C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815465; FubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
MEDLINE-88214495; FUDNEG=2297495; Kuepper H.; Kuepper H.; Kuepper H.; Kuepper H.; Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAULET-FROM J.; Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] EMCDINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcum and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 253:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815345; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakso H., Nagoya T., Saino Y., Arai K., Albert Mizaguchi T., Manaski A., Sada M., Nakso H., Hirata M., Miyata T., Arbert M., Nakso H., Naksoya T., Saino Y., Arai K., Albert M., Nakso H., Naksoya T., Saino Y., Arai K., Albert M., Naksoya H., Hirata M., Miyata T., Albert M., Nakso H., Naksoya H., Hirata M., Miyata T., Albert M., Naksoya H., Hirata M., Miyata T., Albert M., Naksoya H., Hirata M., Miyata T., Albert M., Naksoya H., Naksoya H., Hirata M., Miyata T., Albert M., Naksoya H., Hirata M., Miyata T., Albert M. Miyata M., Naksoya H., Hirata M., Miyata T., Miller M., Naksoya H., Hirata M., Miyata T., Miller M., Naksoya M., Miller M., Naksoya H., Hirata M., Miyata T., Miller M., Naksoya M., Miller M., Naksoya M.	MEDLINE-88234495; FUDNEG-2797495; Kuepper H.; Kuepper H.; Kuepper H.; Kuepper H.; Kuepper H.; Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MALLET-FOOY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Trey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frinary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE; MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nakao H., Saino Y., Arai K.,	MEDLINE-88234495; FUDMEG=2397495; GUIDDIAND U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (P491: homology with the lipocortin family."; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FCGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauthmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Mattaliano R.J., Sinclair L.K., Miller G.T Hessbach C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funnakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDDLINE-88139278; PubMed-2963810; T.D. MEDLINE-88139278; PubMed-2963810; T.D. M. M. A., AND SEQUENCE.	MEDLINE-88234495; FUDNEd=2397495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; [3] SEQUENCE FROM N.A. MEDLINE-8873202; PubMed-2968983; Pepinsky R.B. 71zard R., Mattalano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "I've distrinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Trimary structure of human placental anticoagulant protein."; Biochemistry 26:8817-882(1987). [55] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	MEDLINE-8824495: FUDMEG=239/495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. US.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FCGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a But J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessblon C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primakosh	MEDLINE-8824495; FUDMEd=239/495; Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Prot. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] REDINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepilosky R.B. Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frinary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092(1987).	MEDLINE-8824499: FUDMEd=229/499: Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann N.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a But J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hessbaton C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Primary structure of human placental anticoagulant protein.";
Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauter-Fooy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a cazt-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). [3] Eur. J. Blochem. 174:585-592(1988). [4] SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Trey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; [4] SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimaty structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE; MEDLINE-8813278; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., And Shidan M., Nakao H., Natata M., Miyata T., And Shidan M., Nakao H., Nakao H., Hirata M., Miyata T., And Shidan M., Nakao H., Nakao H., Hirata M., Miyata T., And Shidan M., Nakao H.,	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Kuepper H.; Kuepper H.; Characterization Of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; [2] Encount Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Foyy I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Blool. Chem. 263:10799-10811(1988). [4] Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA mencaling human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FORY I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard C., Huang RS., Pratt D., Wachter L. Hessiston C., Frey A.Z., Walliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88153463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary Structure of human placental anticoagulant protein."; Frimary Structure of human placental anticoagulant protein."; SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963810;	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Proct Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). Proct. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FOGY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hautmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B.; MEDLINE-88173202; PubMed-2968983; Pepinsky R.B.; Tizard R., Matlane B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). KEULNE-88163463; PubMed-2964863; Frimary structure of human placental anticoagulant protein."; Biochemistry 26:8817-8821987. SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88183288; PubMed-2964863.	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-Fogy I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessband C., Trey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinary 26:8087-8092(1987).	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kupeper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauter-Fooy I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Matlaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Matlant B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; [4] SEQUENCE FROM N.A. MEDLINE-88153453; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987).	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MAURET-FORY I., Reutalingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pervaing J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessison C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrick of human placental anticoagulant protein.";
Grundmann U., Abol KJ., Bohn H., Loebermann H., Lottspeich F., Kupeper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; Pubmed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a Ca2+dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88173202; Pubmed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; [4] SEQUENCE FROM N.A. MEDLINE-8816343; Pubmed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Furakoshi T., Seude B., Nabwed-2963810; Iwasaki A., Suda M., Nakso H., Nasoya T., Saino Y., Arai K., Misasaki A., Suda M., Nakso H., Nasoya T., Saino Y., Arai K., Misasaki A., Suda M., Nakso H., Nasoya T., Saino Y., Arai K., Misasaki A., Suda M., Nakso H., Nasoya T., Saino Y., Arai K., Misasaki A., Suda M., Nakso H., Nasoya T., Saino Y., Arai K., Misasaki A., Suda M., Nakso H., Nasoya T., Saino Y., Arai K., Misasaki A., Suda M., Nakso H., Nasoya T., Saino Y., Arai K., Misasaki A., Suda M., Nakso H., Nasoya T., Saino Y., Arai K., Misasaki A., Suda M., Nakso H., Nasoya T., Saino Y., Arai K., Misasaki A., Suda M., Nakso H., Nasoya T., Saino Y., Arai K., Misasaki A., Suda M., Nakso H., Nasoya T., Saino Y., Arai K., Misasaki A., Suda M., Nakso H., Nasoya T., Saino Y., Arai K., Misasaki A., Suda M., Nakso H., Nasoulana M., Naka M., Nak	Grundman U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a Cal-dependent phospholipid-binding protein.; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8817322; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8815463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein.; Biochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE. SEQUENCE FROM N.A., Nan SEQUENCE. MEDLINE-88139278; PubMed-2963810; Iwasaki A., Suda M., Nakao H., Nasoya T., Saino Y., Arai K.,	Grundman U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauter-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Peptinsky R.B., Tizard K., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813465; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Frimary Structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963810;	Grundman U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; PubMed-245536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R. "Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-296893; Peptinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Frimary structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein."; SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88139278; PubMed-2963810;	Grundman U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; Mauter-Froyy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a "Cloning and expression of cDNA for human protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hessbon C., Frey A.Z., Walliner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEMBLINE B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEMBLINE B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; Five distinct calcium and phospholipid binding proteins share homology with structure of human placental anticoagulant protein."; Frimakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.;	Grundman U., Abol KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Cal-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). REDUINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092.1087.	Grundman U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MALET-FORY I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frunakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frunakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frunakcshi T., Hendrick Chhuman placental anticoagulant protein.";
Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kupeper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R. "Cloning and expression of cDNA for human vascular anticoagulant, a cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8827322; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share boology with Lagacortin I."; "Five distinct calcium and phospholipid binding proteins share proteins to them. 263:10799-10811(1988). [4] Eur. And SEQUENCE FROM N.A. MEDLINE-88163453; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimaty structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-8813278; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Publicato M., Nakoo H., Nakoya T., Saino Y., Arai K., Misaaki A., Suda M., Nakoo H., Nakoya T., Saino Y., Arai K., Misaaki A., Suda M., Nakoo H., Nakoya T., Saino Y., Arai K., Pubmed-2963810; Sequent T., Saio F., Yoshizaki H., Hirata M., Miyata T., Saio Y., Misaya T., Saio Y., Misaya T., Saio Y., Misaya T., Saio Y., Misaya T., Hirata M., Miyata T., Saio Y., Misaya T.,	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R. "Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8817320; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding protein."; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8087-8092(1987). [5] Ewen N.A., AND SEQUENCE ROM N.A., Naubental anticoagulant protein."; Biochemistry 26:8087-8032(8180). [8] Iwasaki A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; [2] Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; Mauter-Fooy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein.*; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pephnsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I.*; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813246; PubMed-2964863; Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.*; [5] Funakcshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein.*; [6] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963810; MEDLINE-88139278; PubMed-2963810;	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; pubMed-245536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R. "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Fryte distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-8815345; PubMed-2964863; Frimary structure of human placental anticoagulant protein."; Brimary structure of human placental anticoagulant protein."; Frimary structure of human placental anticoagulant protein."; Frimary structure of human placental anticoagulant protein."; SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-88153278; PubMed-2963810;	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; [2] Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; Matuer-Fooy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Pepinsky With lipocortin I."; [4] SEQUENCE FROM N.A. MEDLINE-88163463; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullan piacental anticoagulant protein."; Funakoshi T., Hendrickson L.E., McMullan B.A., Fujikawa K.;	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H., "Characterization of CDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; PubMed-245536; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R. "Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8873202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Hurne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). REDUINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Pr	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H.; "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; [2] Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauter-Fooy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. MEDLINE-88273202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; FubMed-2964863; Funakoshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrick of human placental anticoagulant protein.";
Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuengher H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R. "Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share sequence FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE; MEDLINE-8813278; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Pubmed-2063810; Iwasaki A., Suda M., Nakoo H., Hirata M., Miyata T., Arai K., Miscouch M., Nakoo H., Nakoya T., Saino Y., Arai K., Pubmed-2063810; Iwasaki A., Suda M., Nakoo H., Hirata M., Miyata T., Arai K., Pubmed-2063810; Iwasaki A., Suda M., Nakoo H., Nakoya T., Saino Y., Arai K., Pubmed-2063810; Iwasaki A., Suda M., Nakoo H., Nakoya T., Saino Y., Arai K., Pubmed-2063810; Iwasaki A., Suda M., Nakoo H., Nakoya T., Saino Y., Arai K., Pubmed-2063810; Iwasaki A., Suda M., Nakoo H., Nakoo H., Nakoya T., Saino Y., Arai K., Pubmed-2063810; Iwasaki A., Saino M., Nakoo H., N	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kupeper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubmed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; Pubmed-296893; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding protein."; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] Ewenther A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauter-Fooy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakcshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Eptimary structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863;	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88171329; pubmed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R. "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-296893; Pephinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frow of stinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Frimary structure of human placental anticoagulant protein."; Brimary structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8817-892(1987). SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-881392/8; PubMed-2963810;	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-245636; Ca2+dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Frey A.Z., Walliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.;	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329: Pubmed-245536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R. "Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8873202; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Prinary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092.1087).	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauter-Fooy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] Eur. J. Biochem. 174:585-592(1988). [3] Eur. J., Chow E.P., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrick cof human placental anticoagulant protein.";
Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuengher H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329; PubMed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R. "Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-2968983; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow B.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share sequence FROM N.A. MEDLINE-88163463; PubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] SEQUENCE FROM N.A., AND SEQUENCE; MEDLINE-8813278; PubMed-2963810; Iwasaki A., Suda M., Nakoo H., Nagoya T., Saino Y., Arai K., Pubmed-2063810; Iwasaki A., Suda M., Nakoo H., Hirata M., Miyata T., Arai K., Miscouch M., Nakoo H., Nakoya T., Saino Y., Arai K., Pubmed-2063810; Iwasaki A., Suda M., Nakoo H., Hirata M., Miyata T., Arai K., Pubmed-2063810; Iwasaki A., Suda M., Nakoo H., Nakoya T., Saino Y., Arai K., Pubmed-2063810; Iwasaki A., Suda M., Nakoo H., Nakoya T., Saino Y., Arai K., Pubmed-2063810; Iwasaki A., Suda M., Nakoo H., Nakoya T., Saino Y., Arai K., Pubmed-2063810; Iwasaki A., Suda M., Nakoo H., Nakoo H., Nakoya T., Saino Y., Arai K., Pubmed-2063810; Iwasaki A., Saino M., Nakoo H., N	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kupeper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; pubmed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88273202; Pubmed-296893; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; "Five distinct calcium and phospholipid binding protein."; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Blochemistry 26:8087-8092(1987). [5] Ewenther A., Suda M., Nakao H., Nagoya T., Saino Y., Arai K.,	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauter-Fooy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-8813463; PubMed-2964863; Funakcshi I., Hendrickson L.E., McMullen B.A., Fujikawa K.; Frimary structure of human placental anticoagulant protein."; Eptimary structure of human placental anticoagulant protein."; [5] SEQUENCE FROM N.A., AND SEQUENCE. MEDLINE-88139278; PubMed-2964863;	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88171329; pubmed-2455636; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R. "Cloning and expression of CDNA for human vascular anticoagulant, a Ca2+-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-88173202; PubMed-296893; Pephinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; Frow of stinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). SEQUENCE FROM N.A. MEDLINE-88163463; PubMed-2964863; Frimary structure of human placental anticoagulant protein."; Brimary structure of human placental anticoagulant protein."; Primary structure of human placental anticoagulant protein."; Biochemistry 26:8817-892(1987). SEQUENCE FROM N.A. AND SEQUENCE. MEDLINE-881392/8; PubMed-2963810;	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-2455636; MEDLINE-88271329; PubMed-245636; Ca2+dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] SEQUENCE FROM N.A. Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hesslon C., Frey A.Z., Walliner B.P.; Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88163463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.;	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family."; Proc. Natl. Acad. Sci. U.S.A. 88:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-8271329: Pubmed-245536; Maurer-Fogy I., Reutelingsperger C.P.M., Pleters J., Bodo G., Stratowa C., Hauptmann R. "Cloning and expression of CDNA for human vascular anticoagulant, a Cat-dependent phospholipid-binding protein."; Eur. J. Blochem. 174:585-592(1988). SEQUENCE FROM N.A. MEDLINE-8873202; Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L. Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] Biol. Chem. 263:10799-10811(1988). Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Prinakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; "Prinary structure of human placental anticoagulant protein."; Hochemistry 26:8087-8092.1087).	Grundmann U., Abel KJ., Bohn H., Loebermann H., Lottspeich F., Kuepper H., "Characterization of cDNA encoding human placental anticoagulant protein (PP4): homology with the lipocortin family.; Proc. Natl. Acad. Sci. U.S.A. 85:3708-3712(1988). [2] SEQUENCE FROM N.A., AND PARTIAL SEQUENCE. MEDLINE-88271329; PubMed-2455636; Mauter-Fooy I., Reutelingsperger C.P.M., Pieters J., Bodo G., Stratowa C., Hauptmann R.; "Cloning and expression of cDNA for human vascular anticoagulant, a ca2+-dependent phospholipid-binding protein."; Eur. J. Biochem. 174:585-592(1988). [3] Eur. J. Biochem. 174:585-592(1988). [3] Eur. J., Chow E.P., Mattaliano R.J., Sinclair L.K., Miller G.T Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; Burne C., Huang KS., Pratt D., Wachter L Hession C., Frey A.Z., Wallner B.P.; "Five distinct calcium and phospholipid binding proteins share homology with lipocortin I."; J. Biol. Chem. 263:10799-10811(1988). [4] SEQUENCE FROM N.A. MEDLINE-88183463; FubMed-2964863; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrickson L.E., McMullen B.A., Fujikawa K.; Funakoshi T., Hendrick cof human placental anticoagulant protein.";

```
MEDLINE-91065314; PubMed-2147412;
    MEDLINE-22388257; Pubbed-12477932;

MEDLINE-22388257; Pubbed-12477932;

MEDLINE-22388257; Pubbed-12477932;

MILLAR STREWBER R.D., Felingold E.A., Grouse L.H., Derge J.G.,

MILLAR Klausher R.D., Collins F.S., Wagner L., Shemmen C.M., Schuler G.D.,

Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Altschul S.F., Jeddan H., Moore T., Wax S.I., Wang J., Hahach F.,

Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Blotchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Schetz T.E.,

Brownstein M.J., Woden T.B., Toshhyuki S., Carninci P., Prange C.,

Raha S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunarathe P.H.,

Richards S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunarathe P.H.,

Richards S.A., Wolley N.M., Sodergren E.J., Lu X., Gibbs R.A.,

Rahey J., Helton E., Retteman M., Madan A., Rodrigues S., Sanchez A.,

Miting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

Schnerch A., Schehu J.E., Jones S.J.M., Marra M.A.;

"Generation and initial analysis of more than 15,000 full-length

human and mouse cDNA sequences:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Sedimentation equilibrium analysis of five lipocortin-related phospholipase A2 inhibitors from human placenta. Evidence against a mechanistically relevant association between enzyme and inhibitor."; J. Biol. Chem. 263:18657-18663(1988).

X-RAY CRYSTALLOGRAPHY (2.5 ANGSTROMS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ahn N.G., Teller D.C., Blenkowski M.J., McMullen B.A., Lipkin E.W., de Baen C.;
                                                                                                                                                                          Fernandez M.P., Morgan R.O., Fernandez M.R., Carcedo M.T.; The gene encoding human annexin V has a TATA-less promoter with a high G+C content.". Gene 149:253-260(1994).
                                                        Kaplan R., Jaye M., Burgess W.H., Schlaepfer D.D., Haigler H.T.;
"Cloning and expression of cDNA for human endonexin II, a Ca2+ and
phospholipid binding protein "."
J. Biol. Chem. 263:8037-8043(1988).
                                                                                                                                                                                                                                                                                Cookson B.T., Engelhardt S., Smith C., Bamford H.A., Prochazka'M., Talt J.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDILINE-90088443; PubMed-2532007;
Rothhut R., Comera C., Cortial S., Haumont P.-Y., Diep Le K.H., Cavadore J.-C., Conard J., Russo-Marie F., Lederer F.;

**A 32 kDa lipocortin from human mononuclear cells appears to be identical with the placental inhibitor of blood coagulation.";

**Biochem. J. 263:929-935(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE-87317598; PubMed-2957692; Schleefer D.D., Mehlman T., Burgess W.H., Haigler H.T.; Stribeefer D.D., Mehlman T., Burgess W.H., Haigler H.T.; Structural and functional characterization of endonexin II, calcium and phospholipid-binding protein.", Proc. Natl. Acad. Sci. U.S.A. 84:6078-6082(1987).
                                                                                                                                                                                                                                                                                                        "Organization of the human annexin V (ANX5) gene."; Genomics 20:463-467(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  human and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                             SEQUENCE FROM N.A. MEDLINE-88228020; PubMed-2967291;
                                                                                                                                               TISSUE-Lung;
MEDLINE-95047484; PubMed-7958998;
                                                                                                                                                                                                                                                                   MEDLINE-94307733; PubMed-8034319;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE OF 84-92.
MEDLINE-89066652; PubMed-2974032;
Biochem. 102:1261-1273(1987)
                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PARTIAL SEQUENCE.
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profilt institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                    X-RAY CRYSTALLOGRAPHY (2.0 ANGSTROMS).
MEDLINE-92177413; PubMed-1311770;
Huber R., Berendes R., Burger A., Schneider M., Karshikov A.,
Luecke H., Roemisch J., Paques E.-P.;
"Crystal and molecular structure of human annexin V after refinement.
Implications for structure, membrane binding and ion channel
formation of the annexin family of proteins.";
J. Mol. Biol. 223:683-704(1992).
                                                                                                                                   Huber R., Schneider M., Mayr I., Roemisch J., Paques E.-P.;
"The calcium binding sites in human annexin V by crystal structure analysis at 2.0-A resolution. Implications for membrane binding and calcium channel activity.";
FEBS Lett. 275:15-21(1990).
                                                                                                                                                                                                                                                                                                                                                                                                       X-RAY CRYSTALLOGRAPHY (3.0 ANGSTROMS).
MEDLYE-98062249; bubmed-9398511;
Raneko N., Ago H., Matauda R., Inagaki E., Miyano M.;
"Crystal structure of annexin V with its ligand K-201 as a calcium channel activity inhibitor.";
J. Mol. Biol. 274:16-20(1997).
Huber R., Rocmisch J., Paques B.-P.;
"The crystal and molecular structure of human annexin V, an anticoagulant protein that binds to calcium and membranes.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         or send an email to license@lsb-sib.ch).
                                                                                                X-RAY CRYSTALLOGRAPHY (2.0 ANGSTROMS).
MEDLINE=91085549; Pubmed=2148156;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAB40047.1; -. AAB40047.1; AAB40047.1; JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOINED.
JOINED.
JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOINED.
JOINED.
JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; X12454; CAA30985.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   M19384) AAB59545.1; -. M18366; AAA35570.1; -. M21731; AAA36166.1; -.
                                       anticoagulant protein that EMBO J. 9:3867-3874(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAA52386.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAB40047.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BAA00122.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAB40047.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAB40047.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         001687;
001689;
001690;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   J03745;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 D00172;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        001691;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             001681;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             U01682;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    001683;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    001685;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           001686;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL;
EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL;
```

AAB40047.1;

```
ANXAS OR ANXS
                Acetylation.
INIT_MET
                                                                                                                                                                                                                                                                                                                                                                                                                          ANX5_MOUSE
P48036;
                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                   249
                                                                                                                                                                                                                                                                                                                                                         309
                                                                                                                                                                                                                                                                                                                                                                          301
                                            REPEAT
REPEAT
REPEAT
MOD_RES
                                                                                                       SEQUENCE
                                                                                                                          Match
                                                                                            VARIANT
                                     REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                  ANX5_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 3
g
                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                              ò
                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                         ŏ
                                                                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                          d
                          ò
                                                                                                                                           180
                                                                                           188
                                                                                                                                                                                                 KSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIK 308
                                                                                                                                                                                                             68
                                                              9
                                                      GRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEE
                                                                                                                        LRAIKOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFO
                                                                                                                                  AGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVV
                                                                                                                                                                       9 AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLF
                                                                                                                                                                                                                                                                                                                         15-DEC-1998 (Rel. 37, Created)
15-DEC-1998 (Rel. 37, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
16-SEP-2003 (Rel. 47, Last annotation update)
16-SEP-10 (Rel. 47, Last annotation update)
(CBP-I) (Placental anticoagulant protein I) (PAP-I) (PP4)
(Thromboplastin inhibitor) (Vascular anticoagulant-alpha) (VAC-alpha)
                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for
                                                                                                                                                                                                                                                                                                                                                                                                   Bos taurus (Bovine).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Green B.N., Aitken A.; "Novel isoforms of CaBP 33/37 (annexin V) from mammalian brain: structural and phosphorylation differences that suggest distinct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patel Y.,
                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Donato R.,
        Length 319;
                         1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE-93041974; PubMed-1420335;
Learmonth M.P., Howell S.A., Harris A.C.M., Amess
Glambanco I., Blanchi R., Pula G., Ceccarelli P.,
      Score 1585; DB 1;
Pred. No. 3.2e-95;
); Mismatches 1
                                                                                                                                                                                                                                                                                                          320 AA
                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                   GDTSGDYKKALLLLSGEDD 327
                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPR001464; Annexin.
Pfam; PF00191; annexin; 4.
PRINTS; PR00196; ANNEXIN.
ProCom; PD000143; Annexin; 4.
SWART; SW00335; ANX; 4.
      96.78;
                        Matches 318; Conservative
                                                                                                                                                                                                                                                                                                         STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Bovidae; Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PIR; S27214; S27214.
HSSP; P08758; 1ANW.
                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID-9913;
                                                                                                                                                                                                                                                                                                                                                                                   (Anchorin CII
                                                                                                                                                                                                                                                                                                                                                                                            ANXAS OR ANX5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE-Brain;
                                                                                                                                                                                                                                                                                                        ANX5_BOVIN
P81287;
                                                                                 69
                                                                                                                                                            189
                                                                                                                                                                                                  249
                                                                                                                                                                                                                    241
                                                                                                                      129
                                                                                                                                                                                                                                       309
       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                              SECUENCE
                Local
                                                                                                                                                                                                                                                                                      RESULT
                                                                                                                                                                                                                                                                                                          g
                                                                                 ò
                                                                                                   셤
                                                                                                                     ò
                                                                                                                                        윱
                                                                                                                                                           ò
                                                                                                                                                                            윱
                                                                                                                                                                                                ò
                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                         g
```

```
128
                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                        188
                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   68
                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                           129 LRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      189 AGELKWGIDEEKFITIFGIRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
01-FEB-1996 (Rel. 34, Last sequence update)
Annexin A5 (Annexin V) (Lipocortin V) (Endonexin II) (Calphobindin I)
(CBP-I) (Placental anticoagulant protein I) (PAP-I) (PP4)
(Thromboplastin inhibitor) (Vascular anticoagulant-alpha) (VAC-alpha)
                                                                                                                                                                                                                                                                          9 AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLF
                                                                                                                                                                                                                                                                                                                                        69 GRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEE
                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Craniata, Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae; Mus
PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium/phospholipid-binding; Repeat; Blood coagulation;
                                                                                                                                                                                                                                          1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Adachi I., Kojima K., Fukuoka S.-I., Ogawa H., Matsumoto I., Submitted (AUG-1995) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE-Peritoneal cavity;
MEDLINE-96422179; PubMed-8824796;
MEDLINE-66422179; PubMed-8824796;
MEDLINE-Garcia M.I., Kozxak C.A., Morgan R.O., Fernandez
"Mouse annexin V chromosomal localization, cDNA sequence
conservation, and molecular evolution.";
                                                                                                                                                                                                            DB 1; Length
                                                                                                                            ACETYLATION (BY SIMILARITY);
                                                                                                                                                                                                       Score 1536.5; DB 1; Length
Pred. No. 4.2e-92;
5; Mismatches 5; Indels
                                                                                                                                                                           50FCE18E95F19CB0 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  319
                                                              ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
                                                                                                                                           ↓↓
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GDTSGDYKKALLLL-SGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
NCBI_TaxID=10090;
                                                                                                                                                                              ¥.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
STRAIN-129/SvJ; TISSUE-Liver;
                                                                                                                                                                                                          93.78;
96.68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3enomics 31:151-157(1996).
                                                                                                                                                                            35942
                                                                                                                                                                                                                           Best Local Similarity 96.6
Matches 309; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                            320 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
```

us-09-970-969-4.rsp

```
ð
                                    g
                                                                õ
                                                                                       g
                                                                                                                                                                                       This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as iong as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RGTVTDFPGFDERADAETLRKAMKGLGTDEES1LTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RGTVTDFPGFDGRADAEVLRKAMKGLGTDEDSILNLLTSRSNAQROEIAQEFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Gaps
                                                SMART; SM00335; ANX; 4.
PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium/phospholipid-binding; Repeat; Blood coagulation;
      Rodriguez-Garcia M.I., Morgan R.O., Fernandez M.R., Bances P., Fernandez M.P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1; Length 319;
                                     "Mouse annexin V genomic organization includes an endogenous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       55055BAF2E1C36B7 CRC64;
                                                                                                                             -i- DOMAIN: A part of phospholipid.
calcium and phospholipid.
-i- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
-i- SIMILARITY: CONTAINS 4 annexin repeats.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No. 1.9e-88;
9; Mismatches 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 90.3%; Score 1479.5; 93.7%; Pred. No. 1.96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
                                                                                                                                                                                                                                                                                                                  AJ230108; CAA13092.1; --
AJ230110; CAA13092.1; --
AJ2301110; CAA13092.1; JOINED.
AJ230114; CAA13092.1; JOINED.
AJ230116; CAA13092.1; JOINED.
AJ230118; CAA13092.1; JOINED.
AJ230119; CAA13092.1; JOINED.
AJ230121; CAA13092.1; JOINED.
AJ230122; CAA13092.1; JOINED.
AJ230123; CAA13092.1; JOINED.
AJ230123; CAA13092.1; JOINED.
AJ230123; CAA13092.1; JOINED.
AJ230123; CAA13092.1; JOINED.
MEDLINE-99072820; PubMed-9854034;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       35752 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  InterPro; IPR001464; Annexin.
Pfam; PF00191; annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                             EMBL; U29396; AAC52530.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         P48036; MOUSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarica
hes 296; Conservative
                                                                                                                                                                                                                                                                                                          BAA09728.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MGD; MGI:106008; Anxa5.
InterPro; IPR001464; Ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22
94
178
253
319 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HSSP; P14668; 1A8B,
SWISS-2DPAGE; P4803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Placenta.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REPEAT
                                                                                                                                                                                                                                                                                                                                              EMBL;
                                                                                                                                                                                                                                                                                                                                                                        EMBL;
EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                  EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL;
                                                                                                                                                                                                                                                                                                                       EMBL;
                                                                                                                                                                                                                                                                                                           EMBL;
                                                                                                                                                                                                                                                                                                                                   EMBL;
                                                                                                                                                                                                                                                                                                                                                             EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
```

```
SIPAYLAETLYYAMKGAGTDDHTLIRVVVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 303
   SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                                                                                                                                                                                                                                                                                                                                                     01-57871990 (Rel. 14, Created)
15-JUL-1998 (Rel. 36, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Annexin A5 (Annexin V) (Lipocortin V) (Endonexin II) (Calphobindin I)
(CBP-I) (Placental anticoagulant protein I) (PAP-I) (PP4)
(Thromboplastin inhibitor) (Vascular anticoagulant-alpha) (VAC-alpha)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Swairjo M.A., Concha N.O., Kaetzel M.A., Dedman J.R., Seaton B.A.; "Cat'st-'bridging mechanism and phospholipid head group recognition in the membrane-binding protein annaxin V."; Nat. Struct. Biol. 2:968-974(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN-Wistar; TISSUE-Brain;
MEDLINE-66301899; PubMed-8667030;
Obsawa K., Imal Y., Ito D., Kohsaka S.;
"Molecular cloning and characterization of annexin V-binding proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Métazoa; Chórdata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  무
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE-98272673; PubMed-9609693; Campos B. Mo Y.D., Mealy T.R., Li C.W., Swairjo M.A., Balch C., Head J.F., Retzinger G., Dedman J.R., Seaton B.A.; **
"Mutational and crystallographic analyses of interfacial residues annexin V suggest direct interactions with phospholipid membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         imai Y., Kohsaka S.;
Structure of rat annexin V gene and molecular diversity of 1ts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 X-RAY CRYSTALLOGRAPHY (1.9 ANGSTROMS).
MEDLINE-93369587; PubMed-8362244;
Concha N.O., Head J.F., Kaetzel M.A., Dedman J.R., Seaton B.A.;
"Rat annexin V crystal structure: Ca(2+)-induced conformational
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE-88273202; PubMed-2968983;
Pepinsky R.B., Tizard R., Mattaliano R.J., Sinclair L.K.,
Miller G.T., Browning J.L., Chow B.P., Burne C., Huang K.S.,
Pratt D., Wachter L., Hession C., Frey A.Z., Wallner B.P.;
Frive distinct calcium and phospholipid binding proteins share
homology with lipocortin I.*;
J. Biol. Chem. 263:10799-10811(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               X-RAY CRYSTALLOGRAPHY (2.0 ANGSTROMS) OF 2-319.
                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  X-RAY CRYSTALLOGRAPHY (1.9 ANGSTROMS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eur. J. Blochem. 232:327-334(1995).
                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE-96035863; PubMed-7556178;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE-96069783; PubMed-7583670;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  lochemistry 37:8004-8010(1998).
                                                                                                                                                                          GDYKKALLLCGGEDD 319
                                                                                                                                      GDYKKALLLL-SGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  changes.";
Science 261:1321-1324(1993).
                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INTERACTION WITH DNMT1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                [1]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN-Wistar;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (Anchorin CII)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ANXAS OR ANXS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         rissue-Kidney
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            transcripts.
                                                                   244
                                                                                                                                                                                                                                                                                                                                                                                RAT
253
                                                                                                                                      313
                                                                                                                                                                                                      304
                                                                                                                                                                                                                                                                                                                                                                                ANX5_
                                                                                                                                                                                                                                                                                                                                         ANX5_RAT
                                                                                                                                                                                                                                                                                                                                                                                                                A POP THE SECOND TO SECOND THE SECOND SECOND
```

```
NCBI_TaxID-9031;
                                                                                                                                                                                                                                                                                                                                                                                    ANXAS OR ANXS
                                                                                                                                                                                                                                                                                                                                 01-AUG-1990 (
01-FEB-1996 (
15-SEP-2003 (
                                                                                                                                                                                                                                                                                                                   ANX5_CHICK
P17153;
                                                                                                                                                72
                                                                                                                                                                                                          192
                                                                                                                                                                                                                                      252
                                                                                                                                                                                                                                                    242
                                                                                                                                                                                                                                                                  312
                                                                                                                                                                                                                        182
                                                                                         Query Match
Best Local 9
                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                 Gallus
    HELIX
HELIX
HELIX
HELIX
HELIX
HELIX
                                                      HELIX
                                                                    HELIX
                                                                                                                                                                                                                                                                                                              ANX5_CHICK
                                                                                                                                                                                                                                                                                                      RESULT 5
    22222222222
                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                  ď
                                                                                                                                                ò
                                                                                                                                                              g
                                                                                                                                                                             Qγ
                                                                                                                                                                                           쉽
                                                                                                                                                                                                        Ω
                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                      δy
                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                               g
                                                                               This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bloinformatics and the EMEL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@lab.sib.ch).
with highly hydrophilic peptide structure.";
J. Neurochem. 67:89-97(1996).
I. Neurochem. 67:89-97(1996).
I. Neurochem. 67:89-97(1996).
I. SUNGINIA STREAM OF THE THROMBOPLASTIN-SPECIFIC COMPLEX, WHICH IS INVOLVED IN THE BLOOD COAGULATION CASCADE.
I. SUBUNIT: MONOMER. Binds ATRX and DNWTI.
I. DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.
I. SIMILARITY: BCILOGS TO THE ANNEXIN FAMILY.
I. SIMILARITY: COURTINS 4 annexin repeats.
                                                                                                                                                                                                                                                                                                                                                     ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
                                                                                                                                                      JOINED.
JOINED.
JOINED.
                                                                                                                                                                                   JOINED.
                                                                                                                                                                                                 JOINED.
JOINED.
JOINED.
                                                                                                                                                                                                                                                                                                                         InterPro; IPR001464; Annexin.
Pfam; PF00191; annexin; 4.
PRIMTS; PR00196; ANNEXIN; 4.
ProDom; PD000143; Annexin; 4.
                                                                                                                                        EMBL; M21730; AAA41512.1; -.
                                                                                                                                                                   BAA07708.1; J
BAA07708.1; J
BAA07708.1; J
BAA07708.1; J
BAA07708.1; J
BAA07708.1; J
                                                                                                                                               BAA07708.1;
BAA07708.1;
BAA07708.1;
                                                                                                                                                                                                                                                                                                                                                                                        80
152
236
311
                                                                                                                                                                                                                                                                                                                                                                                                                       PDB; 1A8B; 17-JUN-98.
PDB; 1BCO; 13-JAN-99.
PDB; 1BC1; 13-JAN-99.
PDB; 1BC3; 13-JAN-99.
                                                                                                                                                                                                                                                                        PDB; 1BCW; 13-JAN-99.
PDB; 1BCY; 13-JAN-99.
PDB; 1BCZ; 13-JAN-99.
PDB; 1GSN; 13-MAR-02.
                                                                                                                                                                                                                            2RAN; 30-NOV-94.
1A8A; 17-JUN-98.
1A8B; 17-JUN-98.
                                                                                                                                                                                                                                                                                                           04-FEB-03.
                                                                                                                                                                                                                                                                                                     04 - FEB - 03
                                                                                                                                                                                                                                                                                                                                                                                         20
92
176
251
                                                                                                                                                                           D42131; 7
D42132; 7
                                                                                                                                                      D42129;
                                                                                                                                                              D42130;
                                                                                                                                                                                          D42133;
                                                                                                                                                                                                  D42134;
                                                                                                                                                                                                                042136;
                                                                                                                                                                     D63337
                                                                                                                                                                                                                       C29250;
                                                                                                                                                                                                                                                                                                                   PDB; 1N44;
                                                                                                                                                                                                                                                                                                                                                                                               REPEAT
REPEAT
REPEAT
MOD_RES
TURN
HELIX
                                                                                                                                                                     EMBL;
EMBL;
EMBL;
EMBL;
EMBL;
EMBL;
                                                                                                                                                      EMBL;
EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                HELIX
HELIX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HELIX
HELIX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HELIX
TURN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HELIX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HELIX
                                                                                                                                                                                                                                                                                                                                                                                                                                                          HELIX
                                                                                                                                                                                                                      PIR;
PDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LURN
                                                                                                                                                                                                                                     PDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  TURN
```

```
131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                           62 LVNDMKSELTGKPEKLIVALMKPSRLYDAYELKHALKGAGTDEKVLTEIIASRTPEELRA 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      132 IKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLIQANRDPDAGIDEAQVEQDAQALFQAGE 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSI 251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDT 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                71
                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                  01-FEB-1996 (Rel. 33, Last sequence update)
15-SEP-2003 (Rel. 42, Last sequence update)
Annexin A5 (Annexin V) (Lipocortin V) (Endonexin II) (Calphobindin I) (CBP-1) (Placental anticoagulant protein I) (PAP-I) (PP4)
(Thromboplastin inhibitor) (Vascular anticoagulant-alpha) (VAC-alpha)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                             1; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
MEDIINE=88186917; PubMed=283352;
Fernandez M.P., Selmin O., Martin G.R., Yamada Y., Pfaeffle M.,
Deutzmann R., Mollenhauer J., von der Mark R.;
"The structure of anchorin CII, a collagen binding protein isolated from chondrocyte membrane.";
                                                                                                                                                                                                                                                    88.8%; Score 1455.5; DB 1; Length 318; 91.8%; Pred. No. 6.7e-87; ive 12; Mismatches 13; Indels 1;
                                                                                                                                                                                                             35613 MW; 1A755A7C11FA11CE CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE-90020458; pubmed-2552626;
Moss S.E., Crumpton M.J.;
"Alternative splicing or cloning artefact?";
Frends Biochem. Sci. 14:325-325(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           321 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            J. Biol. Chem. 263:5921-5925(1988)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  302 SGDYKKALLLCGGEDD 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SGDYKKALLLL-SGEDD 327
                                                                                                                                                                                                                                                                                           Matches 291; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUGGEST SEQUENCING ERROR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STANDARD;
  197
214
225
225
242
242
273
273
300
188
200
218
228
244
263
274
278
293
303
318 AA;
                                                                                                                                                                                                                                                                          Similarity
```

```
ANX5_CYNPY
P70075;
                                                                                                                                                                                                                                                                                                                     68
                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 6
ANX5_CYNPY
  HELIX
HELIX
HELIX
                             HELIX
TURN
                                               HELIX
HELIX
HELIX
HELIX
HELIX
                                                                                                                  TURN
                                                                                                                                                      HELIX
HELIX
HELIX
TURN
                                                                                                                                                                                             HELIX
HELIX
                                                                                                                                    HELIX
HELIX
                                                                                                         ELIX
  à
                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce.or send an email to license@isb-sib.ch).
                Fernandez M.P., Selmin O., Martin G.R., Yamada Y., Pfaeffle M., Deutzmann R., Mollenhauer J., von der Mark K.;
"The structure of anchorin CII, a collagen binding protein isolated from chondrocyte membrane.";
J. Biol. Chem. 265:8344-8344(1990).
                                                                                                                                                                                                                                                                                                                              for
                                                                                                                        SEQUENCE FROM N.A.
STRAIN-White leghorn; TISSUE-Liver;
MEDLINE-94215900; PubMed-8163186;
Fernandez M.P., Fernandez M.R., Morgan R.O.;
"Structure of the gene encoding anchorin CII (chick annexin V).";
Gene 141:179-186(1994).
                                                                                                                                                                                                                                                                 TISSUE-Liver;
MEDLINE-93249384; PubMed-8484740;
Boustead C.M., Brown R., Walker J.H.;
"Isolation, characterization and localization of annexin V from
                                                                                   Pfaeffle M., Ruggiero F., Hofmann H., Fernandez M.P., Selmin
Yamada Y., Garrone R., von der Mark K.;
EMBO J. 9:1336-1336(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProDom; PD000143; Annexin; 4.
SMARY; SMO313; ANX; 4.
PROSITE: PS00223; ANXEXIN; 4.
Annexin; Calcium/phospholipid-binding; Repeat; 3D-structure.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -> E (IN REF. 1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
D -> E (IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL, U01660, AAB39917.1; EMBL, U01671, AAB39917.1; JOINED. EMBL, U01672, AAB39917.1; JOINED. EMBL, U01673, AAB39917.1; JOINED. EMBL, U01675, AAB39917.1; JOINED. EMBL, U01676, AAB39917.1; JOINED. EMBL, U01678, AAB39917.1; JOINED. EMBL, U01678, AAB39917.1; JOINED. EMBL, U01679; AAB39917.1; JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; M30971; AAA48591.1; ALT_SEQ.
REVISIONS.
MEDLINE-90243721; PubMed-2159478;
                                                                                                                                                                                                                                                   Blochem. J. 291:601-608(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 InterPro; IPR001464; Annexin.
Pfam; PF00191; annexin; 4.
PRINTS; PR00196; ANNEXIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            156
240
315
168
14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PIR; A35381; LUCHS.
PDB; 1ALA; 31-OCT-93.
                                                                                                                                                                                            PARTIAL SEQUENCE.
                                                                                                                                                                                                                                           chicken liver.
                                                                            REVISIONS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REPEAT
CONFLICT
TURN
HELIX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EPEAT
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 FGRDLVDDLKSELTGKFETLMVSLMRPARIFDAHALKHAIKGAGTNEKVLTEILASRTPA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 248 VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      188 QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cynops pyrrhogaster (Japanese common newt).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Amphibia, Batrachia, Caudata, Salamandroidea, Salamandridae, Cynops.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-Testis;
Yamamoto T., Hikono T., Abe S.I.;
"Differential expression of annexin V during spermatogenesis in the
                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                    Length 321;
                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                     36198 MW; 43E2983F86797025 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                 78.0%; Score 1279; DB 1; 78.1%; Pred. No. 1.5e-75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last sequence update)
15-SPP-2003 (Rel. 42, Last annotation update)
Incaxin AS (Annexin V).
                                                                                                                                                                                                                                                                                                                                                                                                                                38; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            323 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301 QKDTSGDYRKALLLLCGGDD 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                308 KGDTSCDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               newt Cynops pyrrhogaster.";
Dev. Genes Evol. 206:64-71(1996)
                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 78.1%
Matches 250; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STANDARD;
                                                                                                                                                                                                                                                                                                                                                                     321 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       [1]
SEQUENCE FROM N.A.
NCBI_TaxID=8330;
```

```
SEQUENCE
  between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                  ö
                                                                     This SWISS-PROT entry is copyright. It is produced through a collaboration
                                                                                                                                                                                                                                                                                                                                                                                            73 LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLFEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                        KOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                         187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIPAYLAETLYYAMKGAGTODHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           307
                                                                                                                                                                                                                                                                                                                                                     72
                                                                                                                                                                                                                                                                                                                                                                 13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLISRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                    annexin repeats may form one binding site for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-APR-1990 (Rel. 14, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Annexin A6 (Annexin VI) (Lipocortin VI) (P68) (P70) (Protein III)
(Chromobindin 20) (67 kDa calelectrin) (Calphobindin-II) (CPB-II).
          MEMBRANE FUSION AND IS INVOLVED IN EXOCYTOSIS (BY SIMILARITY). DOMAIN: A pair of annexin repeats may form one binding site fo
 FUNCTION: CALCIUM/PHOSPHOLIPID-BINDING PROTEIN WHICH PROMOTES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (Human).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                  ;;
                                                                                                                                                                                                                                                                                                              Length 323;
                                                                                                                                                                                                                                                                                                                                56; Indels
                                                                                                                                                                                                                                                                                        044B31AC28164CE2 CRC64;
                                                                                                                                                                                                                                                                                                              DB 1;
                                       BELONGS TO THE ANNEXIN FAMILY.
                                                                                                                                                                                                                                                                                                            Query Match 66.3%; Score 1086; DB 3 Best Local Similarity 67.9%; Pred. No. 4e-63; Matches 214; Conservative 45; Mismatches 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      672 AA.
                             calcium and phospholipid.
SIMILARITY: BELONGS TO THE ANNEXIN FAMIL
SIMILARITY: Contains 4 annexin repeats.
                                                                                                                                                                                                                                                         ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
                                                                                                                                                                                                               SMART; SM00335; ANX; 4.
PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-AUG-1988 (Rel. 08, Created)
                                                                                                                                                                                                                                                                                        35981 MW;
                                                                                                                                                                        InterPro; IPR001464; Annexin.
                                                                                                                                                  EMBL; D64134; BAA11012.1; -. HSSP; P08758; 1AVH.
                                                                                                                                                                                 Pfam; PF00191; annexin; 4.
PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          313 GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                               86
158
242
317
                                                                                                                                                                                                                                                        98 1
182 2
257 3
323 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ANXA6 OR ANX6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ANX6_HUMAN
P08133;
                                                                                                                                                                                                                                                                              REPEAT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                     133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      253
                                                                                                                                                                                                                                                         REPEAT
                                                                                                                                                                                                                                                REPEAT
                                                                                                                                                                                                                                                                    REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ANX6_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT
ð
                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                        음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q
```

```
Attausherg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Attausherg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.P., Bhat N.K.,
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.P., Bhat N.K.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsheh F.,
A platchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
A platchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Brownstein M.J., Usdin T.B., Bonaldo M.F., Carannic P., Prange C.,
A Brownstein M.J., Usdin T.B., Peters G.J., Abramson R.D., Mullahy S.J.,
Basak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunarane P. H.,
A Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Whiting M., Madan A., Young A.C., Shevohenko Y., Bouffard G.G.,
Blakesley R.W., Touchman J.W., Schen E.D., Dickson M.C.,
Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
M. Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
M. Hunderfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
M. Hunderfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
M. Hunderfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
M. Hunderfield Y.S.N., Robert B.J., Myers R.M.,
M. Hunderfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
M. Hunderfield Y.S.N., Krzywinski M.I., Skalska W., Smailus D.E.,
M. Hunderfield Y.S.N., Krzywinski M.I., Skalska W., Smailus D.E.,
M. Hunderfield Y.S.N., Krzywinski M.I., Skalska W., Smailus D.E.,
M. Hunderfield Y.S.N., Robert M. M., Madra M.A.,
M. Hunderfield Y.S.N., Krzywinski M.I., Skalska W., Smailus D.E.,
M. Hunderfield Y.S.N., Krzywinski M.I., Skalska W., Smailus D.E.,
M. Hunderfield Y.S.N., Rrzywinski M.I., Skalska W., Smailus D.E.,
M. Hunderfield Y.S.N., Rrzywinski M.I., Skalska W., Smailus D.E.,
M. Hunderfield Y.S.N., Rrzywinski W.I., Marra M.A.,
M. Hunderfield Y.S.N., Rrzywinski W.I., Skalska W., Smailus D.E.,
M. Hunderfield Y.S.N., Rrzywinski W.I., Skalska W., Smailus D.E.,
M. M. M. 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
MEDLINE-88124902; PubMed-2963335;
SlodAhof T.C., Slaughter C.A., Lezhcki I., Barjon P., Reynolds G.A.;
"Human 67-kDa calelectrin contains a duplication of four repeats
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -!- DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.
-!- PTM: PHOSPHORYLATED IN RESPONSE TO GROWTH FACTOR STIMULATION.
-!- MISCELLANBOUS: SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY.
-!- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INTERNATIVE DOUBLY. ; .
J. MOI. BIOI. 260:638-643(1996).
-!- FUNCTION: MAY ASSOCIATE WITH CD21. MAY REGULATE THE RELEASE OF CA(2+) FROM INTRACELLULAR STORES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            :
                                                                                                                                                                                                                                                    "Primary structure of the human, membrane-associated Ca2+-binding protein p68 a novel member of a protein family."; EMBO J. 7:21-27(1988).
                                                                                                                                                       Crompton M.R., Owens R.J., Totty N.F., Moss S.E., Waterfleld M.D. Crumpton M.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE-96326697; PubMed-8709144;
Benz J., Bergner A., Hofmann A., Demange P., Goettig P., Liemann
Huber R., Voges D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Yoshizaki H., Mizoguchi T., Arai K., Shiratsuchi M., Shidara Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE-89380132; PubMed-2528541; Iwasaki A., Suda M., Watanabe M., Nakao H., Hattori Y., Nagoya Saino Y., Shidara Y., Maki M.; Saino Y., Shidara Y., Maki M.; "Structure and expression of cDNA for calphobindin II, a human placental coagulation inhibitor."; J. Biochem. 106:43-49(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Structure and properties of calphobindin II, an anticoagulant protein from human placenta."; J. Biochem. 107:43-50(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "The structure of recombinant human annexin VI in crystals membrane-bound.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          found in 35-kDa lipocortins.";
Proc. Natl. Acad. Sci. U.S.A. 85:664-668(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              X-RAY CRYSTALLOGRAPHY (3.2 ANGSTROMS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE-Uterus;
MEDLINE-22388257; PubMed-12477932;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE-90236978; PubMed-2139657;
                                                                                                        MEDLINE-88196081; PubMed-3258820;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           human and mouse cDNA sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -!- INDUCTION: BY EBV
[1]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
```

œ

```
REPEAT
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REPEAT
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REPEAT
      合
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ô
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIPAYLAETLYYAMKGAGIDDHILIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDIS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           73 LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        133 KOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                Proposition of the control of the co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 932; DB 1; Length 672;
Pred. No. 7.8e-53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                  ANNEXIN 1.

ANNEXIN 2.

ANNEXIN 3.

ANNEXIN 4.

ANNEXIN 6.

ANNEXIN 7.

ANNEXIN 8.

ACETYLATION.

IE -> MK (IN REF. 2).

IE -> MK (IN REF. 2).

E -> D (IN REF. 1).

E -> D (IN REF. 1).

W; 2829237029BDIDCB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               672 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. 7.8e-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                EMBL; D00510; BAA00400.1; -.
EMBL; Y00097; CAA68286.1; -.
EMBL; J03578; AAA35656.1; -.
EMBL; BC017046; AAH17046.1; -.
PIR; JU00032; AGH068.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ANX6_MOUSE STANDARD;
P14824;
O1-APR-1990 (Rel. 14, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        75742 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       56.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1:111 || || || || || || 324
310 GEYKKTLLKLSGGDD 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            313 GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 183; Conservative
                                                                                                                                                                                                                                   Genew; HGNC:544; ANXA6.
MIM; 114070; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1
225
554
618
672 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REPEAT
MOD_RES
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                   REPEAT
REPEAT
REPEAT
REPEAT
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ANX6_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 % E
 윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           음
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTILTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     73 LIDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     133 KQVYEEEFGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                         Moss S.E., Crompton M.B., Crumpton M.J.;

Moslecular clonding of murine p68, a Ca2+-binding protein of the lipocortin family. 7, 21-27(1988).

-1- FUNCTION: MAY ASSOCIATE WITH CD21. MAY REGULATE THE RELEASE OF CA(2+) FROM INTRACELLULAR STORES.

-1- DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.

-1- MISCELLANDOUS: SEEMS TO PIE ANNEXIN FAMILY.

-1- SIMILARITY: Contains 8 annexin repeats.
                                                                                                                        Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Musinae; Mus
01-APR-1990 (Rel. 14, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Annexin A6 (Annexin VI) (Lipocortin VI) (P68) (P70) (Protein III)
(Chromobindin 20) (67 kDa calelectrin) (Calphobindin-II) (CPB-II)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 672;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2D85C11DD235FC76 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       56.9%; Score 932; DB 1; 59.0%; Pred. No. 7.8e-53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SMART; SM00335; ANX; 8.
PROSITE; PS00223; ANNEXIN; 8.
Annexin; Calcium/phospholipid-binding; Repeat.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      49; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
ANNEXIN 5.
ANNEXIN 6.
ANNEXIN 6.
                                                                                                                                                                                                                                                                                                       MEDLINE-89030687; PubMed-2972541;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HSSP, P79134; 1AVC.
MGD; MGI:88255; Anxa6.
InterPro: IPRO01464; Annexin.
Pfam: PF00191; annexin. 8.
PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            75755 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; X13460; CAA31808.1; -. PIR; S01786; S01786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 59.09
Matches 186; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           259
371
443
532
607
672 AA;
                                                                                                                                                                                                      NCBI_TaxID-10090;
                                                                                                      ANXA6 OR ANX6.
                                                                                                                                                                                                                                                      SEQUENCE FROM STRAIN-BALB/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REPEAT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INIT_MET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
```

σ

8, 8

ò

```
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE-EPA, and Uterus;

MEDLINE-22388257; PubMed-12477932;

MEDLINE-22388257; PubMed-12477932;

MEDLINE-22388257; PubMed-12477932;

MEDLINE-22388257; PubMed-12477932;

MEDLINE-22388257; PubMed-12477932;

MEDLINE-22388257; PubMed-12477932;

MEDLINE-22388257; PubMed E.A., Ghenmen C.M., Schuler G.D.,

Altschul S.F., Zecberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Altschul S.F., Zecberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Datchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Brownstein M.J., Usdin T.B., Toshhyuki S., Carninot P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Robards S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

Richards S. Morley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

Mitling M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

Schnerch A., Schentz J., Marra M.A.;

"Generation and initial analysis of more than 15,000 full-length

human and mouse cDNA sequences.";
                                                            190 KWGTDEAQFIYILGNRSKQHLRLVFDEYLKTTGKPIEASIRGELSGDFEKLMLAVVKCIR 249
                                                                                                                                                                                                                                                                                P09525; Q96F33; Q9BWKI;
01-WAR-1989 (Rel. 10, Created)
01-077-1996 (Rel. 34, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Annexin A4. (Annexin IV) (Lippcortin IV) (Endonexin I) (Chromobindin 4)
(Protein II) (P32.5) (Placental anticoagulant protein II) (PAP-II)
(PP4.X) (35-beta calcimedin) (Carbohydrate-binding protein P33/P41)
                                        SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Characterization of human p33/41 (annexin IV), a Ca2+ dependent carbohydrate-binding protein with monoclonal anti-annexin IV antibodies, ASI1 and ASI7."; Biol. Pharm. Bull. 20:224-229(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Grundmann U., Amann E., Abel K.-J., Kuepper H.A.; "Isolation and expression of cDNA coding for a new member of the phospholipase A2 inhibitor family.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
MEDLINE-97239215; Pubmed-9084877;
Satoh A., Takayama E., Kojima K., Ogawa H., Katsura Y., Kina T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-92155721; PubMed-1346776;
Talt J.F., Smith C., Frankenberry D.A., Miao C.H., Adler D.A.,
Disteche C.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Chromosomal mapping of the human annexin IV (ANX4) gene."; Genomics 12:313-318(1992).
                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Behring Inst. Mitt. 82:59-67(1988)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-88309022; PubMed-2970257;
                                                                                                                     313 GDYKKALLLLSGEDD 327
                                                                                                                                             |:||||| | | ||
310 GEYKKALLKLCGGDD 324
                                                                                                                                                                                                                                                                   STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID-9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ANXA4 OR ANX4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matsumoto I.:
                                                                                                                                                                                                                                                                   ANX4_HUMAN
                                      253
                                                                                                                                                                                                                                           ANX4_HUMAN
                                                                                                                                                                                                                          RESULT
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/of send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14 GTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                             "Sedimentation equilibrium analysis of five lipocortin-related phospholipese A2 inhibitors from human placenta. Evidence against a mechanistically relevant association between enzyme and inhibitor."; 7. Biol. Chem. 263:18657-18663(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -!- MISCELLANEOUS: SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY. -!- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY. -!- SIMILARITY: Contains 4 annexin repeats.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                human placental annexin IV.";
J. Mol. Biol. 216:219-221(1990).
-!- FUNCTION: CALCIUM/PHOSPHOLIPID-BINDING PROTEIN WHICH PROMOTES
MEMBRANE FUNCTION IS INVOLVED IN EXOCYTOSIS (BY SIMILARITY).
-!- DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.
                                                Ahn N.G., Teller D.C., Bienkowski M.J., McMullen B.A., Lipkin E.W., de Haen C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE-91073383; PubMed-2254922; Freemont P.S., Driessen H.P.C., Verbi W., Crumpton M.J.; "Crystallization and preliminary X-ray crystallographic studies of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                               Tait J.F., Sakata M., McMullen B.A., Miao C.H., Funakoshi T., Hendrickson L.E., Fujikawa K.;
"Placental anticoagulant proteins: isolation and comparative characterization four members of the lipocortin family.";
Blochemistry 27:6268-6276(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 318;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        78; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -> Q (IN REF. 1).
16B19E01500350F7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; Score 923; DB 1;
; Pred. No. 1.2e-52;
53; Mismatches 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SMART; SM00335; ANX; 4.
PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calclum/phospholipid-binding; Repeat.
                                                                                                                                                                                                                                                               SEQUENCE OF 1-14; 27-71; 99-143 AND 280-318.
MEDLINE-89118212; PubMed-2975506;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ANNEXIN 4
SEQUENCE OF 26-55; 98-123 AND 279-307.
MEDLINE-89066652; PubMed-2974032;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; M19383; AAC41689.1; ALT_INIT.
EMBL; M82809; AAA51740.1;
EMBL; D78152; BAA11227.1; ALT_INIT.
EMBL; BC00182; AAH00182.1; ALT_INIT.
EMBL; BC011659; AAH11659.1; ALT_INIT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         95 R
35751 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  InterPro; IPR001464; Annexin.
Pfam; PF00191; annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  56.38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HSSP; P13214; IANN,
SWISS-2DPAGE; P09525; HUMAN,
PMMA-2DPAGE; P09525; -.
Genew; HGNC:542; ANXA4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   K-RAY CRYSTALLOGRAPHY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     318 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MIM; 106491;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 183;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REPEAT
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INIT_MET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dp
```

ö

```
PIR; A27107; LUPG4
                                                                                                                                       REPEAT
MOD_RES
MOD_RES
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                      194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ANX6_RAT
                                                                                                                    REPEAT
REPEAT
                                                                                                            REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 11
STTTTTTT S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  윱
                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                  요
                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                               임
                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its mase by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
      184
                                                                                                                                       ANX4_PIG STANDARD.,
POB132; Q29306;
D01-MG-1988 (Rel. 08, Last sequence update)
01-MG-1988 (Rel. 08, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
Annexin A4 (Annexin IV) (Lipocortin IV) (Endonexin I) (Chromobindin 4)
                                                          QVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGELK
                                                                                     WGIDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS
                                                                                                                           254 IPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG
                                                                                                                                                                                                                                                                                                                                                                                          TISSUE-Intestinal epithelium;
MEDILNE-87275850; PubMed-2956093;
WHOPER K., Johnsson N., Plessmann U., Van P.N., Soling H.-D., Ampe C., Vandekerckhove J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                 "The amino acid sequence of protein II and its phosphorylation site for protein kinase C; the domain structure Ca2+-modulated lipid binding proteins."; EMBO J. 6:1599-1604(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -i- DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.
-i- MISCELLANEOUS: SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY.
-i- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
-i- SIMILARITY: Contains 4 annexin repeats.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Cetartiodactyla; Suina; Suidae; Sus.
NCBI_TaxID=9823;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; F14682; CAA23194.1; -.
                                                                                                                                                                                ||:| ||:| ||
305 DYRKVLLVLCGGDD 318
                                                                                                                                                                    DYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                 Sus scrofa (Pig)
                         65
                                                                 125
                                                                                     194
                                                                                                         185
                                                                                                                                                                    314
                                                                                                                                                                                                                     RESULT
                                                                                                                                                                                                                                                  d
                                              ò
                                                                원
                                                                                     ò
                                                                                                         셤
                                                                                                                                               셤
                                                                                                                                                                    ö
                                                                                                                                                                                      음
                                                                                                                           ò
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               74 DDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIK 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          65 DDLKSELSGNFEQVILGHWATPTVLYDVQELRRAMKGAGTDEGCLIEILASRTPEEIRRIN 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         134 QVYEEBYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGELK 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WCTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14 GTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              254 IPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Métazoa; Chórdata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eur. J. Blochem. 230:741-751(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Annexin A6 (Annexin VI) (Lipocortin VI) (P68) (P70) (Protein III)
(Chromobindin 20) (67 kDa calelectrin) (Calphobindin-II) (CPB-II)
(Calculum-binding protein CATA 65/67)
                                                            PRINTS; PR00196; ANNEXIN.
Probon; PD000143; Annexin; 4.
SMART; SM0335; ANNEXIN; 4.
PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calclum/phospholipid-binding; Repeat; Phosphorylation;
ACCETYLATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fan H., Josic D., Lim Y.P., Reutter W.; "cDNA cloning and tissue-specific regulation of expression of calcium-binding protein 65/67. Identification as a homologue o
                                                                                                                                                                                                                                                                                                                                                                                                             Length 318;
                                                                                                                                                                                                                                                                                                                                                                                                        56.2%; Score 921; DB 1; Length 31
58.6%; Pred. No. 1.6e-52;
ive 51: Mismatches 79; Indelb
                                                                                                                                                                                                                                                                                            ANNEXIN 4. (PROBABLE). PHOSPHORYLATION (BY PKC). FA7D9CE2B7C631E8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   672 AA.
                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 58.6%; Pred. No. 1.be-
Matches 184; Conservative 51; Mismatches
                                                                                                                                                                                                                           ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN=Sprague-Dawley; TISSUE-Liver; MEDLINE=95331313; PubMed=7607247;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                              6 6 P
318 AA; 35697 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    314 DYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ||:| ||:| ||:| 305 DYRKVLLILCGGDD 318
                   InterPro; IPR001464; Annexi
Pfam; PF00191; annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                     82
154
238
313
P13214; 1ANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           annexin VI.
```

```
NCBI_TaxID=10090;
                                                                      STRAIN-C3H/HeJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 180;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 314
                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   305
                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                                                                                                                          REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                     REPEAT
                                                                                                                                                                                                                                                                                                                                                                                  REPEAT
      q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                  This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                            252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              253 SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         69
                                                                                                                                                                                                                                                                                                                                                                                        13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                    133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              193 KWGIDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
CA(2+) FROM INTRACELLULAR STORES.

DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.
                                MISCELLANEOUS: SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY
                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                     Length 672;
                                       SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
SIMILARITY: Contains 8 annexin repeats.
                                                                                                                                                                                                                                                                                                                                                   56.2%; Score 921; DB 1; Length 67
58.7%; Pred. No. 4e-52;
Live 48; Mismatches 82; Indels
                                                                                                                                                                                                                                                                                                                       ANNEXIN 8.
BBEE798A9CAB1511 CRC64;
                                                                                                                                                                        Pfam; PF00191; annexin.
Pfam; PF00191; annexin; 8.
PRINTS; PR00196; ANNEXIN.
PRODO196; ANNEXIN.
SMART; SM00335; ANX; 8.
PROSITE; PS00223; ANNEXIN; 7.
Annexin; Calcium/phospholipid-binding; Repeat.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                            BY SIMILARITY
ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
ANNEXIN 5.
ANNEXIN 5.
ANNEXIN 7.
                                                                                                                                                                                                                                                                                                                        667 . P
75622 MW;
                                                                                                                                             EMBL; X86086; CAA60040.1; -. PIR; S65683; S52844.
HSSP; P79134; 1AVC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |:|||||| | | || GEYRKALLKLCGGDD 324
                                                                                                                                                                                                                                                                                                                                                                      Matches 185; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Annexin A4 (Annexin IV).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                                                                                    443
532
607
672 AA;
                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ANX4_MOUSE
P97429;
                                                                                                                                                                                                                                                                                                                                                                                                          10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   313
                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                              INIT_MET
                                                                                                                                                                                                                                                      REPEAT
REPEAT
REPEAT
REPEAT
                                                                                                                                                                                                                                                                                                    REPEAT
REPEAT
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ANX4_MOUSE
ID ANX4_MC
AC P97429;
DT 01-NOV
DT 28-FEB-
DE Annexir
             <del>:</del>
   a
                                                                                                                                                                                                                                                                                                                                                                                                                              å
                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIK 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGELK 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  254 IPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    194 WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14 GTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL
                                                                                                                                                                                                    Sable C.L., Shannon J., Riches D.W.H.;
Submitted (JAN-1997) to the EMBL/GenBank/DDBJ databases.
-!-PUNCTION: CALCIUM/PHOSPHOLIPID-BINDING PROFEIN WHICH PROMOTES
MEMBRANE FUSION AND IS INVOLVED IN EXOCYTOSIS (BY SIMILARITY).
-!-DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.
-!-MISCELLANEOUS: SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY (BY SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
-!-SIMILARITY: Contains 4 annexin repeats.
Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 318;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          76; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22 82 ANNEXIN 1.
94 154 ANNEXIN 2.
178 238 ANNEXIN 3.
253 313 ANNEXIN 4.
318 AA; 35858 MW; 53FAC7AD8006BC0D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MGD; MGI:88030; Anxa4.
InterPro; IPR001464; Annexin.
Prim; Pr00191; annexin; 4.
PRINS: PR00196; ANNEXIN; 4.
PRODON; PD000143; Annexin; 4.
SMART; SM00335; ANX; 4.
Annexin; Calcium/Phospholipid-binding; Repeat.
INIT_MET 0 0 BY SIMILARITY.
REPEAT 22 ANNEXIN 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            55.9%; Score 916; DB 1;
57.3%; Pred. No. 3.4e-52;
ative 58; Mismatches 76;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; U72941; AAB40697.1; -. HSSP; P13214; 1ANN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ||:| ||:| || DYRKVLLILCGGDD 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DYKKALLLISGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                            FROM N.A.
```

Calcium/phospholipid-binding; Repeat; 3D-structure.

```
å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                          01-JAN'1990 (Rel. 13, Created)
01-JAN'1990 (Rel. 13, Last sequence update)
01-JAN'1990 (Rel. 13, Last sequence update)
15-SEP-2003 (Rel. 14, Last sequence update)
Annexin A4 (Annexin IV) (Lipocortin IV) (Endonexin I) (Chromobindin 4)
(Protein II) (P32.5) (Placental anticoagulant protein II) (PAP-II)
(PP4-X) (35-beta calcimedin) (Carbohydrate-binding protein P33/P41)
                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
MEDLINE=96205957; PubMed=8631806;
MEDLINE=96205957; PubMed=8631806;
MEDLINE=96205957; PubMed=8631806;
Modima K., Yamamoto K., Irifmura T., Osawa T., Ogawa H., Matsumoto I.;
"Characterization of carbohydrate-binding protein p33/41: relation
with annexin IV, molecular basis of the doublet forms (p33 and p41),
and modulation of the carbohydrate binding activity by
phospholipids.";
J., Blol. Chem. 271:7679-7685(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bos taurus (Bovine).
Sukaryota Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml;
Mammalla; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoldea;
Bovidae; Bovinee; Bos.
                                                                                                                                                                                                                                          MEDLINE-89050088; PubMed-2847715; Hamman H.C., Gaffey L.C., Lynch K.R., Creutz C.E.; "Cloning and characterization of a cDNA encoding bovine endonexin
                                                                                                                                                                                                                                                                                (chromobindin 4).";
stochem. Blophys. Res. Commun. 156:660-667(1988)
                                                                                                                                                                                                                                                                                                                                                                                                                                              Sutton R.B., Sprang S.R.;
Submitted (SEP-1995) to the PDB data bank.
                                                                                                                                                                                                                                                                                                                                                                                                                                   (-RAY CRYSTALLOGRAPHY (2.3 ANGSTROMS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL, M22248; AAA30507.1; --
EMBL; X13627; CAA31954.1; --
EMBL; D78178; BAA11243.1; --
PIR; A31578; LUBO4
PDB; IANN: 29-JAN-96
PDB; 1AOW; 14-JAN-98
PDB; 114A; 25-APR-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SMART; SM00335; ANX; 4.
PROSITE; PS00223; ANNEXIN; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR001464; Annexin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfam; PF00191; annexin; 4.
                     STANDARD;
                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                             CBI_TaxID-9913;
                                                                                                                                 ANXA4 OR ANX4.
                                                                                                                                                                                                                                 IISSUE-Liver
                    ANX4_BOVIN
P13214;
```

```
DDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIK 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14 GTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5 GTVKAASGFNAAEDAQTLRKAMKGLGTDEDAIINVLAYRSTAQRQEIRTAYKTTIGRDLM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OVYEEFYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGELK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         254 IPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-0CT-1996 (Rel. 34, Created)
01-0CT-1996 (Rel. 34, Last sequence update)
120-FB-2003 (Rel. 34, Last sequence update)
Annexin A4 (Annexin IV) (Lipocortin IV) (36 kDa zymogen granule membrane associated protein) (ZAP36).
ANXA OR ANXA.
Canis familiaris (Dog).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 318;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 55.8%; Score 914; DB 1; Length 31 Best Local Similarity 58.0%; Pred. No. 4.5e-52; Matches 182; Conservative 51; Mismatches 81; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            35757 MW; 86BDBDF349D774FD CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        318 AA
                            ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
L -> V (IN R
E -> K (IN R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  314 DYKKALLLESGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            318 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ANX4_CANFA
P50994;
Annexin; (INIT_MET REPEAT REPEAT REPEAT REPEAT CONFLICT CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ANX4_CANFA
AD ANX4_CA
AD ANX4_CA
DT 01-0CT
DT 01-0CT
DT 28-FEB
DE Annex11
DE Annex11
GE MEMBER
                                                                                                                                     HELIX
TURN
                                                                                                                                                                                    HELIX
                                                                                                                                                                                                                                                                                                                                      HELIX
HELIX
HELIX
HELIX
                                                                                                                                                                                                                                                                                                                                                                                                 HELIX
                                                                                                                                                                                                                                                                                                                        FURN
```

ö

73 64

```
Similarity
                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                 NCBI_TaxID=9031;
                                                              ANXA6 OR ANX6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REPEAT
REPEAT
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REPEAT
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                               REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
  ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the Buropean Bioinformatics institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@lsb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                74 DDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIK 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGELK 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14 GTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              254 IPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    245 KSAYFAERLYKSMKGLGTDDNTLIRVMVSRAEIDMMDIRESFKRLYGKSLYSFIKGDTSG
                                                                                 FUNCTION: CALCIUM/PHOSPHOLIPID-BINDING PROTEIN WHICH PROMOTES MEMBRANE FUSION AND IS INVOLVED IN EXOCYTOSIS (BY SIMILARITY). DOMAIN: A pair of annexin repeats may form one binding site for
                                                                                                              calcium and phospholipid, MISCELLANEOUS: SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY (BY SIMILARITY).
Chordata; Craniata; Vertebrata; Euteleostomi; Carnivora; Fissipedia; Canidae; Canis.
                                                                                                                                                                                                                                                                                                                                                                                                                               Length 318;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   81; Indels
                                                                     Submitted (SEP-1994) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                         42EF5B89179B4863 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                              ; DB 1;
3.1e-51;
                                                                                                                                             SIMILARITY: BELONGS TO THE ANNEXIN FAMILY. SIMILARITY: Contains 4 annexin repeats.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            671 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Pred. No. 3.1e
54; Mismatches
                                                                                                                                                                                                                                                                                                                                             Calcium/phospholipid-binding; Rep
0 0 BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                              55.0%; Score 901;
                                                                                                                                                                                                                                                                                                                                                                 ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
                                                                                                                                                                                                                                                                                                                                                                                                 ANNEXIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
                                        SEQUENCE FROM N.A.
STRAIN-Mongrel; TISSUE-Pancreas;
                                                                                                                                                                                                                                                                              InterPro: IPR001464; Annexin.
Pfam: PF00191; annexin; 4.
PRINTS: PR00196; ANNEXIN.
ProDom; PD000143; ANNEXIN; 4.
PROSITE; PS00223; ANNEXIN; 4.
                                                                                                                                                                                                                                                                                                                                                                                                          35681 MW;
                                                                                                                                                                                                                                                            EMBL; D38223; BAA07398.1; -. HSSP: P13214: LANN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ||:| ||:|-|| || DYRKVLLICGGDD 318
                                                                                                                                                                                                                                                                                                                                                                                                                                         57.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                 22
94 1
178 2
253 3
 Sukaryota; Metazoa;
          Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                    MCBI_TaxID-9615;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Simi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ANX6_CHICK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 194
                                                                                                                                                                                                                                                                                                                                                      INIT_MET
REPEAT
                                                                                                                                                                                                                                                                                                                                               Annexin;
                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                              Fukuoka
                                                                                                                                                                                                                                                                                                                                                                            REPEAT
                                                                                                                                                                                                                                                                                                                                                                                     REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ANX6_CHICK
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 15
a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
```

```
This .SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics. Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               126 HDLVAAYKDAYERDLEADVVGDTSGHFKKMLVVLLQGAREEDDVVSEDLVEQDAKDLLEA 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                190 GELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10 OVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                130 RAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cao X., Genge B.R., Wu L.N., Buzzi W.R., Showman R.M., Wuthier R.E.; "Characterization, cloning and expression of the 67-kDA annexin from chicken growth plate cartilage matrix vesticles."; Biochem. Biophys. Res. Commun. 197:556-561(1993).
                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chórdata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Gaps
01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Annexin A6 (Annexin VI) (Lipocortin VI) (P68) (P70) (Protein III)
(Chromobindin 20) (67 kDa calelectrin) (Calphobindin-II) (CPB-II).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CA(2+) FROM INTRACELLULAR STORES (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 671;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DOE02F4311A93D98 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Score 896.5; DB 1;
; Pred. No. 1.5e-50;
51; Mismatches 83;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -1- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SMART; SM00335; ANX; 8.
PROSITE; PS00223; ANNEXIN; 5.
Annexin; Calcium/phospholipid-binding; Repeat.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ANNEXIN 4.
ANNEXIN 5.
ANNEXIN 6.
ANNEXIN 7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ANNEXIN 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ANNEXIN 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE-94092130; PubMed-8267590;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PIR, JC2029; JC2029.
HSSP, P79134; 1AVC.
InterPro; IPR001464; Annexin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            75218 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                calcium and phospholipid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Process Prof. 1. Prof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          54.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; S67466; AAB29337.2; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  al Similarity . 57.74
184; Conservative
                                                                                                                                                                                                                                                                                                   Gallus gallus (Chicken).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   183
258
370
442
531
607
671 AA;
```

qq ŏ

දු දු

Search completed: August 22, 2003, 21:33:38 Job time : 9.66667 secs

```
Gencore version 5.1.6

Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: August 22, 2003, 21:29:22 ; Search time 31.6667 Seconds

(without alignments)
2664.733 Million cell updates/sec
Perfect score: 1639
Sequence: 1 MAGGCGHMAQVLRGTVTDFP.......KGDTSGDYKKALLLLSGEDD 327
Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5
Searched: 830525 seqs, 258052604 residues
Total number of hits satisfying chosen parameters: 830525
Minimum DB seq length: 0
Maximum DB seq length: 2000000000
```

Database : SPTREMBL_23:*

1: SP_actoria:*
2: sp_bacteria:*
4: sp_lung1:*
5: sp_lung1:*
6: sp_lunen:*
7: sp_mhc:*
8: sp_omcanel:*
9: sp_omcanel:*
10: sp_omcanel:*
11: sp_orden:*
12: sp_vertebrate:*
13: sp_vertebrate:*
14: sp_unclassified:*
15: sp_artrus:*
16: sp_artrus:*
17: sp_archen:*
17: sp_archen:*
18: sp_archen:*
18: sp_archen:*
19: sp_archen:*
16: sp_archen:*
17: sp_archen:*
16: sp_archen:*
17: sp_archen:*
17: sp_archen:*
18: sp_archen:*
18: sp_archen:*
19: sp_archen:*
10: sp_archen:*
10: sp_archen:*
11: sp_archen:*
11: sp_archen:*
12: sp_archen:*
13: sp_archen:*
14: sp_archen:*

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Score | Auery | Auer

OBvinz rattus norv QBbp75 mus musculu Q9n161 bombyx mori Q81418 drosophila Q92140 mus musculu	Q9n159 bombyx mori Q9ng55 drosophila Q8wph0 bombyx mori Q8wph0 bombyx mori		Ogczi7 mus musculu OSSv57 artemia san Og9jg3 mus musculu Q8mjb5 oryctolagus OSvag3 drosophila	Oyyet Olyman 1ac Oywet Grosophila Oysh7 brachydanio Oshzm6 equus cabal Oyyls xenopus lae	Q2/804 caenornabol Q8ccv9 mus musculu Q8bsl2 mus musculu Q2/4/3 caenorhabdi Q3xy89 schistosoma
11 Q8VIN2 11 Q8BP75 Q9NL61 5 Q81GJ8 11 Q921D0	09NL59 09NG55 08WPG9	09505 09005 09005 095903 0978V2	11 095217 5 095857 11 099463 5 098463 5 098463	0 0 0	0 027864 11 Q8CCV9 11 Q8BSL2 5 Q27473 5 Q9XY89
324 324 324 301	323 324 324 324 324 324	**************************************		3322	322 415 209 317 365
47.0 46.9 45.9 45.9	44444 46000 80000	4 4 4 4 2 2 2 2 2 2 0 0 0 4	4444 20114 201119 201119	399.44 399.4 399.3	32.0 32.0 32.0
770 769 752 752	729 720 715 714	705 701 701 701 694.5	686.5 685.5 685 673	646.5 644.5 644.5	573.5 572 572 540 528
17 18 19 20 21	22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	22 23 30 30		3 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	4444

ALIGNMENTS

RESULT	LT 1
COMMO	
a :	QSWV69 PRELIMINARY; PRT; 320 AA.
AC	
텀	(TrEMBLrel.
DI	(TrEMBLrel.
ď	01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE	Annexin A5.
SO	Homo sapiens (Human).
8	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
8	Primates;
ŏ	
RN	[1]
RP	SEQUENCE FROM N.A.
2	TISSUE-Skin;
R.	Strausberg R.;
RL	Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.
ပ္ပ	-!- DOMAIN: A PAIR OF ANNEXIN REPEATS MAY FORM ONE BINDING SITE FOR
ខ	CALCIUM AND PHOSPHOLIPID (BY SIMILARITY).
ပ္ပ	-!- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
႘	-!- SIMILARITY: CONTAINS 4 ANNEXIN REPEATS.
DR	EMBL; BC018671; AAH18671.1;
DR	InterPro; IPR001464; Annexin.
DR	Pfam; PF00191; annexin; 4.
DR	PRINTS; PR00196; ANNEXIN.
DR	ProDom; PD000143; Annexin; 4.
DR	SMART; SM00335; ANX; 4.
DR	PROSITE; PS00223; ANNEXIN; 4.
KW	Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
ΚW	Repeat.
SO	SEQUENCE 320 AA; 35924 MW; 45FAC411DDBA4D1A CRC64;
õ	96.78;
ă	al Similarity 99.4%; Pred. No. 1.4e-103;
ž	Matches 318; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Οy	8 MAQVLRGTVFDFPGFDERADAETLRKAMKGLGTDEESILTLLFSRSNAQRQEISAAFKTL 67
i	
g C	

ö

```
Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AB9FB40934A3D007 CRC64;
                                                                                                                                                                                                                                                                                         Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       84.8%; Score 1390; DB 11;
Llarity 92.0%; Pred. No. 6.7e-90;
Conservative 12; Mismatches 12;
                                                                                                                                                                                                                                       302 AA
                                                                                                                                                                                                                                                                         Created)
                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       302 302
302 AA; 33965 MW;
                                                                                                                                       GDYKKALLLCGGEDD 319
                                                                                                                   GDYKKALLLL-SGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro; IPR001464; Annexin.
                                                                                                                                                                                                                                                                         07,
07,
23,
                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                       01-AUG-1998 (TrEMBLrel, 01-AUG-1998 (TrEMBLrel, 01-MAR-2003 (TrEMBLrel, Lipocortin V' (Fragment).
                                                                                                                                                                                                                                                                                                                                           Rattus norvegicus (Rat)
Eukaryota; Metazoa; Cho
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
Matches 276; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NON_TER
SEQUENCE
                 184
                                                                                                                   313
                                                                                                                                                     304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Repeat.
                                                                                                                                                                                                                                         070371
                                                                                                                                                                                                         RESULT
                                                 ò
                                                                                g
                                                                                                                   ò
                                                                                                                                                g
                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      193 KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIBETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LESTEAUSBERG R.;
LESTEAUS R.;
LES
                 FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE
                                   VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                   ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Musinae; Mus.
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 11; Length 319;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Match 90.0%; Score 1475.5; DB 11; Lengt Local Similarity 93.4%; Pred. No. 7.1e-96; es 295; Conservative 9; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           52E2C7CCEA386917 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                             Created)
Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                           KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            319 AA; 35738 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                             (TrEMBLrel. 17, (TrEMBLrel. 17, (TremBLrel. 23,
                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUN-2001 (
01-JUN-2001 (
01-MAR-2003 (
Annexin A5.
                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Repeat.
SEQUENCE
                                                                                 128
                                                                                                                  121
                                                                                                                                                     188
                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                         308
                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  124
                                                                                                                                                                                                                                                                                                                                                                                                             099LA1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loca
                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                              a
                                                                                 ö
                                                                                                              g
                                                                                                                                                   ò
                                                                                                                                                                                   ద
                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      õ
                 ò
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RSIPAYLAETLYYAMKGAGTODHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pfam: PF00191; annexin; 4.
PRINTS: PR00196; ANNEXIN.
ProDom: PD000143; Annexin; 4.
SMART; SM00335; ANX; ANX
PROSITE: PS00223; ANNEXIN; 3.
ANNEXIN; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Métazoa; Chórdata; Craniata; Vertebrata; Euteleostoml
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Ra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BINDING SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE-Lung;

MEDLINE-99262163; PubMed-10329451;

MEDLINE-99262163; PubMed-10329451;

Wen Y., Edelman J.L., Rang T., Sang E.;

Lipocortin V may function as a signaling protein for vascular endothelial growth factor receptor-2/Flk-1.";

Biochan. Blophys. Res. Commun. 258:713-721(1999).

-I- DOWAIN: A PAIR OF ANNEXIN REPEATS MAY FORM ONE BINDING SITH CALCIUM AND PHOSPHOLIPID (BY SIMILARITY).

-I- SIMILARITY: BELONGS TO THE ANNEXIN RAMILY.

-I- SIMILARITY: CONTAINS 4 ANNEXIN REPEATS.

EMBL. AF051895; AAC06290.1; -.

HSSP; P14668; 1A8B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 302;
```

```
01-MAR-2003 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                              01-MAR-2003
                                                                                                                                                                                                                                                                          193
                                                                                                                                                                                                                                                                                         191
                                                                                                                                                                                                                                                                                                                                        313
                                                                                                                                                                                                                                                                                                                        251
                                                                                                                                                                                                                                                                                                         253
                                                                                                                                                                                                                                                                                                                                                                                                        099JX6;
                                                                                                                                                                                                                                                                                                                                                                                               9XC660
                                                                                                                                                                                                                                                                                                                                                                                RESULT 6
g
                                                                                                                                                                           ò
                                                                                                                                                                                                           ŏ
                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                      q
                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                        ï
                                                                                                                                                                                                                                                                                                                                                                                                                                      252
                                                                                                                                                                                                                                                                                                                                                                      LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                     133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           72
                                                                                                                                                                                                                                                                                                                                                       63
                                                                                                                                                                                                                                                                                                                                      RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                               KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                          BINDING SITE FOR
                                                                          Bukaryota; Metazoa; Chordata; Cranlata; Vertebrata; Buteleostom!;
Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Atherlnomorpha;
Beloniformes; Adrianichthyldae; Oryziinae; Oryzias.
                                                                                                                                                   of four
                                                                                                                                                                                                                                                               PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                        ä
                                                                                                                               62; Indels
                                                                                                                                                                                                                                                                                        AFD618681BAFF0FE CRC64;
                                             Last sequence update)
Last annotation update)
                                                          Annexin max2.
Oryzłas latipes (Medaka fish) (Japanese ricefish).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Created)
Last sequence update)
                                                                                                                                                                                                                                                                                                        DB 13;
                                                                                                                                                                                                                                                                                                       63.6%; Score 1042; DB 13
64.4%; Pred. No. 2.1e-65;
iive 48; Mismatches 62
                     317 AA
                                     Created)
                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                       317 AA; 34765 MW;
                                                                                                                                                                                                                        IPR001464; Annexin.
                                                                                                                                                                                                                               Pfan; PF00191; annexin; 4.
PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
SWART; SM00335; ANX; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |||:|||||| || || GDYRKALLLLCGGDD 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  313 GDYKKALLLLSGEDD 327
                                   01-NOV-1998 (TrEMBLrel. 08, 01-NOV-1998 (TrEMBLrel. 08, 01-MAR-2003 (TrEMBLrel. 23,
                                             (TrEMBLrel. 08, (TrEMBLrel. 23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (TrEMBLrel. 23, (TrEMBLrel. 23,
                                                                                                                                                                                                                                                                                                              al Similarity 64.4 203; Conservative
                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                         SEQUENCE FROM N.A.
                                                                                                           NCBI_TaxID=8090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OBCEX0;
01-MAR-2003 (
01-MAR-2003 (
                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                        InterPro;
                                                                                                                                                                                                                                                                                                                                       13
                                                                                                                                                                                                                                                                                                                                                                      73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  253
                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                 Local
                    093445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q8CEX0
                                                                                                                                                                                                                                                                                                               Best Loc
Matches
     RESULT 4
093445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08CEX0
                      õ
                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 õ
```

```
133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     73 LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KWGTDEAQFIYILGNRSKQHLRLVFDEYLKTTGKPIEASIREELSGDFEKLMLAVVKCIR 250
                                                                                                                                                                      The FANTOM Consortium, the RIKEN Genome Exploration Research Group Phase I 6 II Team; Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs."
                                                                                                                                                                                                                                                                                                                                                                                                            13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml;
Mammalia; Eutheria; Rodentia; Sciurognathl; Muridae; Murinae; Mus.
                                                 Craniata, Vertebrata, Euteleostomi,
Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                      Length 476;
                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                               Last sequence update)
Last annotation update)
23, Last annotation update)
                                                                                                                                                                                                                                                                                                                56.9%; Score 932; DB 11;
59.0%; Pred. No. 2e-57;
ative 48; Mismatches 81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ¥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                       STRAIN-C57BL/6J;
MEDLINE-22354683; PubMed-12466851;
                                             Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
NCBI_TaxID-10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17,
23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-JUN-2001 (TrEMBLrel. 17, 01-JUN-2001 (TrEMBLrel. 17,
                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 59.09
Matches 186; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similar to annexin A6
                                  Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID-10090;
```

312

ó

```
PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPR001464; Annexin.
                                                                                                                                                                                                                GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                    GEYKKALLKLCGGDD 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pfam; PF00191; annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                       01-NOV-1998 (TrEMBLrel.
01-NOV-1998 (TrEMBLrel.
01-MAR-2003 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SM00335; ANX;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Annexin max1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          [1]
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7
                                                                      193
                                                                                                      191
                                                                                                                                         253
                                                                                                                                                                             251
                                                                                                                                                                                                                313
                                                                                                                                                                                                                                                    311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                           093444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SMART;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Repeat
                                                                                                                                                                                                                                                                                                      RESULT
                                                                                                                                                                                                                                                                                                                                             g
                                                                      ò
                                                                                                      g
                                                                                                                                         ò
                                                                                                                                                                         g
                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                               252
                                                                                                                                                                                                                                                                                                      LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                            192
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           72
                                                                                                                                                                                                                                     of
                                                                                                                                                                                                                                                                                                                                                                                                                               KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                          KOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL
                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Team;
annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
NCBI_TaxID=10090;
                                                PROSITE; PS00223; ANNEXIN, 8.
Annexin, Calcium, Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Score 930; DB 11; Length 673;
; Pred. No. 4.6e-57;
48; Mismatches 81; Indels
                                                                                                                                           667;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE-22334005;
The FANTOM Consortium,
The FANTOM Consortium,
The RING General Exploration Research Group Phase I & III
Analysis of the mouse transcriptome based on functional
60,770 full-length cDNAs.";
Mature 420:563-573(2002)
RABL; AK030728; BAC27101.1;
CRAIL, AK030728; BAC27101.1;
CRAILENCE 673 AA; 75885 MW; DCC5FC56CBD88809 CRC64;
                                                                                                                                                                             80; Indels
                                                                                                                                           Length
                                                                                                      667 AA; 75260 MW; 363088A2A55CFF34 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Last sequence update)
Last annotation update)
                                                                                                                                        ; Score 932; DB 11;
; Pred. No. 3.3e-57;
49; Mismatches 80;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ٤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN-C57BL/6J; TISSUE-BOdy;
MEDLINE-22354683; PubMed-12466851;
                PD000143; Annexin; 8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    56.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |:|||||| | | || GEYKKALLKICGGDD 325
                                                                                                                                         56.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08BSS4 PRELIMINARY;
08BSS4;
01-MAR-2003 (TJEMBLFEL. 2;
01-MAR-2003 (TJEMBLFEL. 2;
01-MAR-2003 (TJEMBLFEL. 2;
                                                                                                                                                          Best Local Similarity 59.0 Matches 186; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity, 59.0 tes 186; Conservative
PRINTS; PR00196; ANNEXIN
                                   SM00335; ANX; 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Annexin A6.
                                                                                     Repeat.
SEQUENCE
                                                                                                                                                                                                                13
                                                                                                                                                                                                                                                11
                                                                                                                                                                                                                                                                                   73
                                                                                                                                                                                                                                                                                                                                                          133
                                                                                                                                                                                                                                                                                                                                                                                                                               193
                                                                                                                                                                                                                                                                                                                                                                                                                                                               191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              73
                                                                                                                                         Query Match
                                   SMART;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DAN WAN DAN SO WAN SO W
                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                     음
                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
```

```
ö
                                                                                                                                       312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           252
                                                                                                   250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99
133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL
                                                                  KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                       SIPAYLAETLYYAMKGAGTDDHTLIRVWVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                                                                           LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             131 VAAYKDAYERDLESDIIGDTSGHFQKMLVVLLQGTRENDDVVSEDLVQQDVQDLYEAGEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BINDING SITE FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                  Oryzias latipes (Medaka fish) (Japanese ricefish).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleosteis
Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha;
Beloniformes; Arianichthyidae; Oryziinae; Oryzias.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITE; PSO0223; ANNEXIN; 4. Annexin; Calcium/phospholipid-binding; Calcium; Calcium; Calcium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                320 AA; 35424 MW; D2EED32C8676777D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                          update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    83;
                                                                                                                                                                                                                                                                                                                                                                                           Last sequence update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
52.8%; Score 866; DB 13;
Best Local Similarity 54.5%; Pred. No. 5.1e-53;
Matches 170; Conservative 59; Mismatches 83;
                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                            Last annotation
                                                                                                                                                                                                                                                                                                                                       320
                                                                                                                                                                                                                                                                                                                                                                       08, Created)
08, Last sequ
23, Last anno
```

Ŋ

```
313 GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         313
                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                  Q90x16;
                                                                       090X16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q921F1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 11
                                                  RESULT
Q90x16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0921F1
 ò
                   g
                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
         312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        73 LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KOVYBERYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            193 KWGTDBEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    253 SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13 RGTVTOFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL 72
                                                                                                       ,
        SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                              ONE BINDING SITE FOR
                                                                                                                                                                           Annexin max4.
Oryzlas latipes (Medaka fish) (Japanese ricefish).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha;
Beloniformes; Adrianichthyidae; Oryziinae; Oryzias.
                                                                                                                                                                                                                                                                        MEDLINE-99025617; Pubmed-9809745; Osterloh D., Wittbrodt J., Gerke V.; *Characterization and developmentally regulated expression of four
                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 13; Length 508;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 53051 MW; 3C6728D475CAE430 CRC64;
                                                                                                                                                         Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    52.2%; Score 856; DB 13; Ilarity 55.2%; Pred. No. 5e-52; Conservative 51; Mismatches 90;
                                                                                                                                                                                                                                                                                                       annexins in the killifish medaka..;

DNA Cell Biol. 17:835-847(1999).

-I- DOMAIN: A PAIR OF ANNEXIN REPEATS MAY FORM
                                                                                                                                                                                                                                                                                                                                     CALCIUM AND PHOSPHOLIPIO (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
-!- SIMILARITY: CONTAINS 4 ANNEXIN REPEATS.
HEMB! 711255; CAA72125.1; --
HEMB! 799134; 1AVC.
                                                                                                                           Ź
                                                                                                                                                Created)
                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                        InterPro: IPR001464; Annexin.
InterPro: IPR006031; XYPPX.
Pfam; PF00191; annexin; 4.
Pfam; PF02162; XYPPX; 15.
                                                                                                                                                                                                                                                                                                                                                                                                                                 PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                            01-NOV-1998 (TrEMBLrel. 08, 01-NOV-1998 (TrEMBLrel. 08, 01-MAR-2003 (TrEMBLrel. 23,
                                                            324
                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                             ProDom; PD000143; Anne:
SMART; SM00335; ANX; 4
                                                313 GDYKKALLLLSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               508 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                       [1]
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                         NCBI_TaxID-8090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       174;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Repeat.
                                                                                                                         093447
                                                                                                    σ
                                                                                                  8
                           셤
                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Óγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     247 SRPAYFAERLYKSMKGLGTDDKTLIRVMVSRCEIDMLEIRCEFRKMYGKSLHSFIKGDCS 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           73 LODLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               127 NITYKIKYGKSLEDDICSDTSFMFQRVLVSLAAGGRDQSSTVNEDLAKQDANDLYEAGEK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 pronephric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SITE FOR
                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibla; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                     A SEVILLE R.A., Nijjar S., Barnett M.W., Jones E.A.;
Seville R.A., Nijjar S., Barnett M.W., Jones E.A.;
T "Annexin 4 (Xanx-4) has a role in the development of the pronent tubules in Xenopus laevis.";
T tubules in Xenopus laevis.";
T tubules in Xenopus laevis.";
E. Submitted (JUN-2201) to the EMBL/GenBank/DDBJ databases.
C -1- DOMAIN: A PAIR OF ANNEXIN REPEATS MAY FORM ONE BINDING SIT.
C -1- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
C -1- SIMILARITY: CONTAINS 4 ANNEXIN REPEATS.
R EMBL; AY039235; AAK83461.1; -.
R EMBL; AY039235; AAR83461.1; -.
R INTERPIC: IPR001464; Annexin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 13; Length 321;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   51.8%; Score 849; DB 13; Length 3
54.0%; Pred. No. 8e-52;
ive 55; Mismatches 90; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SC28CAFAAC17687D CRC64;
                                                                                                                                                                                                           Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                       Ş
                                                                                                                                     321
                                                                                                                                                                                                                                                                               Xenopus laevis (African clawed frog).
                                                                                                                                                                                       Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0921F1;
01-DEC-2001 (TrEMBLrel. 19, Created)
                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        321 AA; 35801 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pfam; PF00191; annexin; 4.
PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
494 GDYKNILLKICGSSD 508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     307 GDYRKVLLKLCGGED 321
                                                                                                                                                                                  01-DEC-2001 (TrEMBLRel. 19, 01-DEC-2001 (TrEMBLRel. 19, 01-MAR-2003 (TrEMBLRel. 23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 54.09
Matches 170; Conservative
                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                           : Xenobns:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SMART; SM00335; ANX;
                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=8355;
                                                                                                                                                                                                                                                                                                                                                           Xenopodinae;
                                                                                                                                                                                                                                                           Annexin 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g S E
```

```
Annexin VIII.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Repeat.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                         095154
                                                                                                                                                                                                                                                                                                                                         RESULT 13
   ð
                                                                                                                                             윱
                                                                                                                                                                                                                                                                                g
                                                                                                                                                              à
                                                                                                                                                                             g
                                                                                                                                                                                              õ
                                                                                                                                                                                                              윱
                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                               LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                               KQVYEEETGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                       253 SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                  13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL 72
                                                                                                                                                                                                                                                        Gaps
                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sclurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
NCBL_TaxiD=10090;
                                                                                                                                                                                            PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                    51.7%; Score 847; DB 11; Length 503; 53.7%; Pred. No. 2.1e-51; ive 59; Mismatches 87; Indels (
                                                                                                                                                                                                                      503 AA; 54079 MW; 33F3471EE21A0D32 CRC64;
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   327 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                          Pfam; PF00191; annexin; 4.
PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                          313 GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                   [1]:| || : | :|
GDYRKILLKICGGND 503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08K2N9
08K2N9;
01-0CT-2002 (TEMBLFel. 22,
01-0CT-2002 (TEMBLFel. 22,
01-MAR-2003 (TEMBLFel. 23,
                                                                                                                                                                                                                                                      Conservative
                Similar to annexin All.
                                                                                                                                                                                     SMART; SM00335; ANX; 4
                                  Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similar to annexin A8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus (Mouse).
                                                                                                                                                                                                                                             Best Local Similarity
Matches 169; Conserv
                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. Strausberg R.;
                                                                                   Strausberg R.;
                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                       73
                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                               Repeat.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ANXAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 12
Q8K2N9
a
                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
```

```
140
                                                                                                                                                                                                                                                                                                                                                                                                                                        200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                                          80
                                                                                                                                                                                                                                                                                                          22 FDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLLDDLKSELT
                                                                                                                                                                                                                                                                                                                                                               82 GKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIKQVYEEEYG
                                                                                                                                                                                                                                                                                                                                                                                     142 SSLEDDVVGDTSGYYQRMLVVLLQANRDPDAG-IDEAQVEQDAQALFQAGELKWGTDEEK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    201 FITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRSIPAYLAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSGDYKKALL
                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bos taurus (Bovine).
Wakaryota: Metazoca; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Bovidae; Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SMART; SM00335; ANX; 4.
PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                   1;
                                                                                                                                                                                                         51.3%; Score 840.5; DB 11; Length 327; 57.8%; Pred. No. 3.3e-51; 1ve 49; Mismatches 79; Indels 1;
Submitted (MAY-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; BC030407; AAH30407.1; -.
MGD; MGI:1201374; Anxa8.
InterPro; IPR001464; Annexin.
                                                                                                                                                                      56DB9CFAFA8C2B21 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            36787 MW; 2EB178E13738CF22 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        327 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                        327 AA; 36724 MW;
                                                                                                                              SMART; SM00335; ANX; 4.
PROSITE; PS00223; ANNEXIN; 4.
SEQUENCE 327 AA; 36724 MW;
                                                                                      PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-DEC-2001 (TrEMBLrel. 19, 01-DEC-2001 (TrEMBLrel. 19, 01-MAR-2003 (TrEMBLrel. 23,
                                                                           Pfam; PF00191; annexin; 4.
                                                                                                                                                                                                           Query Match
Best. Local Similarity 57.8%
Matches 177; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pfam; PF00191; annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           321 NLVGTD 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        321 LLSGED 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            327 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=9913;
```

Length 327;

DB 6;

51.0%; Score 836.5;

```
134
                                                                                                                                                                                253
                                                                                                                                                                                                                                                                                                                                                    254 IPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG 313
                                                                                                                                                                                                                                                                                                                                                                                   KOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            248
                                                                                                  74 TLKSELSGKFERLIVALMYPPYRYEAKELHDAMKGLGTKEGVIIEILASRTKNOLQEIMK 133
                                                                                                                                                      VYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAG-IDEAQVEQDAQALFQAGELK 193
                                                                                                                                                                                                                                                                                                   194 CGTDEMKFITILCTRSARHLMRVFEEYEKIANKSIEDSIKSETHGSLEEAMLTIVKCTRN 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14 TVKGSPHFNPVPDAETLYKAMKGIGTNEQAIIDVLTRRSSAQRQQIAKSFKAQFGSDLTE 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      the RIKEN Genome Exploration Research Group Phase I & II Team;
"Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length colmss.";
Nature 420:563-573(2002).
EMBL: AK090055; BAC41070.1; -.
SEQUENCE 323 AA; 36356 MW; 9P69F57BCFAC6A85 CRC64;
                                                      DLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIKO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KWGTDEDKFTEVLCLRSFPQLKLTFDEYRNISQKDIEDSIKGELSGHFEDLLLAIVHCAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. NCBL_TaxID~10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 323;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  48.7%; Score 799; DB 11; Length 3
49.2%; Pred. No. 2.6e-48;
Live 63; Mismatches 97; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Last sequence update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE-Kidney;
MEDLINE-22354683; PubMed-12466851;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-MAR-2003 (TrEMBLrel. 23,
01-MAR-2003 (TrEMBLrel. 23,
01-MAR-2003 (TrEMBLrel. 23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                       DYKKALLLLSGED 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 49.29
Matches 155, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             = := :=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The FANTOM Consortlum,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Annexin A3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   313
                                                                                                                                                                                                                                                    194
                                                                                                                                                                                                                                                                                                                                                                                                     254
                                                                                                                                                                                                                                                                                                                                                                                                                                                    314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 249
                                                   75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08C1X9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08C1X9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 15
Q8C1X9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AC OOC OOK REPRETED THE REPRETE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                   δy
                                                                                                g
                                                                                                                                                                                             g
                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                             ď
                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                 δý
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ij
                                                                                                                                                                                                                                                                                                                                                                              253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DIKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIKQ 134
                                                                                                                                                                                                                                                                         VYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAG-IDEAQVEQDAQALFQAGELK 193
                                                                                                                                                                                                                                                                                                TVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLLD
                                                                                                                                                                                                WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS
                                                                                                                                                                                                                                                                                                                                                                                                   254 IPAYLAETLYYAMKGAGTDDHTLIRVWVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15 TVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ANXA8 OR ANX8.

Oyctcolagus cuniculus (Rabbit).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
                            ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 327;
                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ANNEXIN.
; 1815B77B6BES0AB7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 6;
55.9%; Pred. No. 6.2e-51; ive 53; Mismatches 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. 6e-50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       327 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            48; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        50.2%; Score 822.5; 55.9%; Pred. No. 6e-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ANNEXIN.
ANNEXIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ANNEXIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         36680 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ||| ||| || || || || || DYKNALLNLVGSD 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DYKKALLLISGED 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 55.99
Matches 175; Conservative
Best Local Similarity 55.9
Matches 175; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       327 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                        15
                                                                                                                                                                      75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         314
                                                                                                                                                                                                                                                                         135
                                                                                                                                                                                                                                                                                                                                                                         194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 14
097529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STITIES BERREAS BECCCCCCC STANK OCCCC STITIES STANK ST
                                                                                                                    셤
                                                                                                                                                                      ö
                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
```

ö

72 89

309 GDYRTVLLKICGEDD 323

Search completed: August 22, 2003, 21:35:25 Job time : 32.6667 secs

```
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
```

(without alignments)
1377.971 Million cell updates/sec August 22, 2003, 21:27:21 ; Search time 37.6667 Seconds - protein search, using sw model OM protein Run on:

US-09-970-969-6 1642 Title: Perfect score: Sequence:

1 MACGCGHMAQVLRGTVTDFP.......RGDTSGDYKKALLLLSGEDD 327

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

1107863 seqs, 158726573 residues Searched:

Total number of hits satisfying chosen parameters:

1107863

seq length: 0 seq length: 2000000000 Minimum DB : Maximum DB : Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

| SIDSI/gcddata/geneseq/geneseqp-embl/AA1992_DAT:
| SIDSI/gcddata/geneseq/geneseqp-embl/AA1992_DAT:
| SIDSI/gcddata/geneseq/geneseqp-embl/AA1994_DAT:
| SIDSI/gcddata/geneseq/geneseqp-embl/AA1985_DAT:
| SIDSI/gcddata/geneseqy-embl/AA1986_DAT:
| SIDSI/gcgdata/geneseqy-embl/AA1986_DAT:
| SIDSI/gcgdata/geneseqy-embl/AA1986_DAT:
| SIDSI/gcgdata/geneseqy-embl/AA1989_DAT:
| SIDSI/gcgdata/geneseqy-geneseqp-embl/AA1999_DAT:
| SIDSI/gcgdata/geneseqy-geneseqp-embl/AA1991_DAT:
| SIDSI/gcgdata/geneseqy-geneseqp-embl/AA1991_DAT:
| SIDSI/gcgdata/geneseqy-embl/AA1991_DAT:
| SIDSI/gcgdata/geneseqy-embl/AA1992_DAT:
| SIDSI/gcgdata/geneseqy-embl/AA1992_DAT:
| SIDSI/gcgdata/geneseqy-embl/AA1992_DAT:
| SIDSI/gcgdata/geneseqy-embl/AA1992_DAT: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1994.DAT:*/SIDS1/gcgdata/geneseq/geneseqp-embl/AA1995.DAT:*/SIDS1/gcgdata/geneseq/geneseqp-embl/AA1995.DAT:*/SIDS1/gcgdata/geneseq/geneseqp-embl/AA1997.DAT:*/SIDS1/gcgdata/geneseq/ /SIDS1/gcgdata/geneseg/genesegp-embl/AA2000.DAT:*/SIDS1/gcgdata/geneseg/genesegp-embl/AA2001.DAT:*/SIDS1/gcgdata/genesegy-embl/AA2002.DAT:* . DAT: * /SIDS1/gcgdata/geneseg/genesegp-embl/AA1998.DAT:*/SIDS1/gcgdata/geneseg/genesegp-embl/AA1999.DAT:* /SIDS1/gcgdata/geneseq/geneseqp-emb1/AA2003.DAT:* /SIDSI/gcgdata/geneseq/geneseqp-embl/AA1980.DAT:*/SIDSI/gcgdata/geneseq/geneseqp-embl/AA1981.DAT:* /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1992 /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1993 A_Geneseq_19Jun03

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

•	. u	n an	n and	ulat	-coa	Sapie	antA	guen	, >`
Description	Modified human	Modified human	Modified human	Placental coad	Vascular anti	PAP-I. Homo	S65T GFP varie	Amino acid sec	Human annexin V, c
ID	AAB50865	AAB50863	AAB50864	AAP80511	AAP91953	AAR13082	AAY13923	AAY84788	ABG31220
DB	22	22	22	σ	10	12	20	21	23
å Query Match Length DB	327	327	327	320	320	320	320	320	320
Query Match	100.0	99.3	99.3	96.8	8.96	96.8	8.96	96.8	8.96
Score	1642	1630	1630	1590	1590	1590	1590	1590	1590
Result No.	1	7	æ	4	S	9	7	80	σ

Novel modified annexin useful for imaging vascular thrombi and apoptosis, has N-terminal chelation site comprising amino acid

anticoagulant PP4 Annexin V/urokinas PAP-I isolated fro CPB-I. Homo sapie Calphobindin I (CP Human CPB-I protei Sequence vascular Sequence vascular Vascular anticoagu CPB-I. Homo sapie Human lipocortin-V CPB-I. Homo sapie S65T GFP variant/h Mouse ischaemic co S65T GFP variant/h Rat annexin-V. Rat	Modified annexin p Lung cancer associ Human placenta-der Human MOXX polypep Human placenta-der S65T GFP variant/h Human cancer assoc Anticoagulative PP Amino acid sequenc Novel human diagno Annexin XI type I Lung cancer associ Human polypeptide Sequence vascular Vascular anti-coag VAC-beta. Springe
AAP90053 AAY22930 AAR26216 AAR41021 ABG32550 AAP80242 AAP80714 AAR11910 AAR26180 AAR26180 AAR26718 AAR26718 AAR3925 AAR3925 AAR73925 AAR756248	ABP56249 AAB03725 ABU54621 ABU54621 ABU54621 AAR13926 AAG96279 AAB47361 AAR34128 AAR34128 AAR34128 AAR34128 AAR34128 AAR35754 AAR35754
10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4114112222333344454455
320 320 320 320 320 320 320 320 3118 3118	2009 3322 3322 3322 3322 3322 3322 3322
~ cocococococococ	00000000000000000000000000000000000000
ユユルユユニュニュニュアアのオオ	1442.5 10012 90312 90312 9023 9023 905.5 8
01144444444444444444444444444444444444	00000000000000000000000000000000000000

ALIGNMENTS

Human; annexin; chelation site; nuclear imaging; apoptosis; transplant rejection. Modified human annexin, SEQ ID NO: 6. AAB50865 standard; Protein; 327 AA. 25-MAY-2000; 2000WO-US14324 99US-0324096 16-MAR-2001 (first entry) (UNIW) UNIV WASHINGTON. WPI; 2001-080465/09. N-PSDB; AAC91370. rait JF, Brown DS; WO200073332-A1 01-JUN-1999; Homo sapiens 07-DEC-2000. AAB50865; RESULT 1 **AAB**50865 us-09-970-969-6.rag

ö 셤 ð g ö 윱 ò 8 à g ö

```
25-MAY-2000; 2000WO-US14324
                                                                                                                                                                                                                                                                                                                                                     Matches 326; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            transplant rejection
                WPI; 2001-080465/09.
N-PSDB; AAC91368.
                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                      327 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200073332-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-DEC-2000
                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAB50864;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAB50864
     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                            IASRTPEELRAIKQVYEEEYGSSLEDDVVGDISGYYQRMLVVLLQANRDPDAGIDEAQVE 180
                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEI 120
                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present sequence is a modified annexin having an N-terminal chelation site, which comprises an amino acid extension including a glycine and a cysteine residue. The modified annexin is useful for imaging vascular thrombi or apoptosis which is associated with response to a chemotherapeutic agent or with rejection as a result of transplantation. The modified annexin can effectively chelate a radiouncilde and retain annexin bloactivity. It can be readily prepared in high radiochemical yield and with high radiochemical purity. In contrast to conventional conjugation chemistriaes that provide a distribution of conjugation products, the modified annexin has a single chelation site remote from the site of biological activity.
                                                                                                                                                                                                                                                                                                                                                                     IASRTPEELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EQLLLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFA
                                                                                                                                                                                                                                                                                                   1 MACGCGHMAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ODAQALFQAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNL
                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                Length 327;
extension which comprises a glycine and a cysteine residue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             chelation site; nuclear imaging; apoptosis;
                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                               100.0%; Score 1642; DB 22; 100.0%; Pred. No. 1.5e-143;
                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TSLYSMIKGDISGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Modified human annexin, SEQ ID NO: 2.
                             English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAB50863 standard; Protein; 327
                         Page 37-38; 39pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-MAY-2000; 2000WO-US14324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                          Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (UNIW ) UNIV WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          transplant rejection.
                                                                                                                                                                                                                     327 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               annexin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200073332-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-DEC-2000
                            Claim 18;
                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAB50863;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tait JF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAB50863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
```

```
240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 SAAFKTLFGRDLLDDLKSBLTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEI 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IASRTPEELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVE 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EQLLLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
                                                                                                                                                                                 The present sequence is a modified annexin having an N-terminal chelation site, which comprises an amino acid extension including a glycine and a cysteine residue. The modified annexin is useful for imaging vascular thrombl or apoptosis which is associated with response to a chemotherapeutic agent or with rejection as a result of transplantation. The modified annexin can effectively chelate a radionuclide and retain annexin bloactivity. It can be readily prepared in high radiochemical yield and with high radiochemical purity. In contrast to conventional conjugation products, the modified annexin has a single chelation site remote from the site of biological activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ODAQALFQAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MACGGGHMAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MACGCGHMAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESTLTLLTSRSNAQRQEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
Novel modified annexin useful for imaging vascular thrombl and apoptosis, has N-terminal chelation site comprising amino acid extension which comprises a glycine and a cysteine residue •
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 327;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             annexin; chelation site; nuclear imaging; apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 1630; DB 22;
Pred. No. 1.9e-142;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Modified human annexin, SEQ ID NO: 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TSLYSMIKGDTSGDYKKALLLLSGEDD
                                                                                                                                Claim 12; Page 30-31; 39pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAB50864 standard; Protein; 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99.38;
```

ö

```
(Updated on
(Updated on
(Updated on
           Homo sapiens
                             EP279459-A.
JP03219875-A.
                                                                              19-FEB-1988;
                                                                                                  20-FEB-1987;
                                                                                                            23-JUL-1987;
                                                                                                                                                                                                                                                                                                                         Updated on
                                                           24 - AUG - 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          188
                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAP91953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 5
AAP91953
ID AAP9:
XX
AC AAP9:
  ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                            121 IASRTPEELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVE 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                QDAQALFQAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNL 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EQLLLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMYSRSEIDLFNIRKEFRKNFA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                     The present sequence is a modified annexin having an N-terminal chelation site, which comprises an amino acid extension including a glycine and a cysteine residue. The modified annexin is useful for imaging vascular thrombi or apoptosis which is associated with response to a chemotherapeutic agent or with rejection as a result of transplantation. The modified annexin can effectively chelate a radionuclide and retain annexin bloactivity. It can be readily prepared in high radiochemical yield and with high radiochemical purity. In contrast to conventional conjugation products, the modified annexin has a single chelation site remote from the site of biological activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MACGCGHMAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEI
                                                                                                                                                                                                                                                                                                                                                                                  61 SAAFKTLFGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEI
                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Placental coagulation inhibitor; disseminated vascular coagulation;
                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                               Novel modified annexin useful for imaging vascular thrombi and apoptosis, has N-terminal chelation site comprising amino acid extension which comprises a glycine and a cysteine residue -
                                                                                                                                                                                                                                                                                                    Length 327;
                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                   Score 1630; DB 22;
Pred. No. 1.9e-142;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TSLYSMIKGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 15; Page 33-35; 39pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Placental coagulation inhibitor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAP80511 standard; protein; 320
                                                                                                                                                                                                                                                                                                   99.3%;
         99US-0324096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (updated)
(updated)
(first entry)
                                                                                                                                                                                                                                                                                                                       326; Conservative
                            (UNIW ) UNIV WASHINGTON,
                                                                  WPI; 2001-080465/09.
N-PSDB; AAC91369.
                                                                                                                                                                                                                                                                                                   Ouery Match
Best Local Similarity
Matches 326; Conserv
                                                Tait JF, Brown DS;
                                                                                                                                                                                                                                                                               327 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-MAR-2003
10-MAR-2003
12-NOV-1990
         01-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  thrombosis
                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAP80511;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                   음
                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                           ò
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                67
                                                                                                                                                                                                                                                                                          Recombinant placental coagulation inhibitor - useful for the prevention and treatment of thromboses or disseminated intra-vascular coagulation.
                                                                                                                                                                                                                                                                                                                                                                                                        useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181 QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                      This polypeptide exhibits strong anticoagulant activities and is use for the treatment and prevention of e.g. thrombosis or disseminated intravascular coagulation in the brain, heart and peripheral blood vessels, such as cerebral and myocardial infarction. It has no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antigenicity against man and can be produced in large amts. using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-MAR-2003 to add missing OS field.)
25-MAR-2003 to correct PF field.)
25-MAR-2003 to correct PR field.)
25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96.8%; Score 1590; DB 9; 99.7%; Pred. No. 9.3e-139;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301 KGDTSGDYKKALLLLCGEDD 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page ?; ?pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAP91953 standard; protein; 320
                                                                                                                                                        Ξ
88EP-0102468
                                          87JP-0037227
87JP-0184428
                                                                                                                                                           Suda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best_Local Similarity 99.7
Matches 319; Conservative
                                                                                                                                                      Saino Y, Iwasaki A,
                                                                                                                                                                                              WPI; 1988-236733/34.
WPI; 1991-329110/45.
N-PSDB; AAN81113.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         recombinant methods
                                                                                                              (KOWA ) KOWA CO LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          320 AA;
```

```
1 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ELRAIKOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QAGELKWGIDEEKFIIIFGIRSVSHLRKVFDKYMIISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This sequence, or a fragment of it, is used in the construction of hybrid phospholipid-binding proteins (PBD) comprisating it least one lipocortin phopholipid binding domain (PBD), e.g. of PAP-I, joined to a gla-domainless vitamin K-dependent protein, e.g. protein C or activated protein C. See AAQ12680-81 for such examples. See also AAQ12678-81. (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                    Phopholipid; binding protein; lipocortin; domain; vitamin K; PBP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           proteins
and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Recombinant prodn. of hybrid phospholipid-binding comprising lipocortin phospholipid-binding domain vitamin K-dependent protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1590; DB 12;
Pred. No. 9.3e-139;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. 9.3e
0; Mismatches
                                                                                                    AAR13082 standard; Protein; 320 AA
            327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Fig 7; 57pp; English.
             KGDTSGDYKKALLLLSGEDD
                         301 KGDTSGDYKKALLLLCGEDD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96.8%;
                                                                                                                                                                                                                                                                                                                                   90WO-US07335
                                                                                                                                                                                                                                                                                                                                                           89US-0459082
                                                                                                                                                       (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 96.8
Best Local Similarity 99.7
Matches 319; Conservative
                                                                                                                                                                                                                                                                                                                                                                                    (ZYMO ) ZYMOGENETICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1991-222905/30.
N-PSDB; AAQ12679.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        320 AA;
                                                                                                                                                                                                                                 gla-domain; VKDP
                                                                                                                                                                                                                                                           Homo saplens
                                                                                                                                                                                                                                                                                                                                   13-DEC-1990;
                                                                                                                                                                                                                                                                                                                                                           29-DEC-1989;
                                                                                                                                                    25-MAR-2003
30-SEP-1991
                                                                                                                                                                                                                                                                                409109953-A.
                                                                                                                                                                                                                                                                                                          11-JUL-1991
                                                                                                                                                                                                                                                                                                                                                                                                            Foster DC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       128
            308
                                                                                                                             AAR13082;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                           PAP-I.
                                                                          RESULT 6
                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               유
             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                           This vascular anti-coagulating protein (VAC)-alpha is used in the preparation of monoclonal antibodies (MAbs). The VAC-alpha is injected into a host animal, in conjugation with eak eyehole limpet haemocyanin, and the B-cells from immunised hosts are then fused with myeloma cells. The resultant hybridomas (VAA-8 and VAA-9) produce Abs specific to VAC-alpha. Abs can be used as immunossay reagents to detect VAC proteins, as affinity ligands for protein purificn, and as medicaments for binding and/or neutralising VAC proteins in vivo. See also AAN91354 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMT1SGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                      /ascular anti-coagulating proteins; hybridomas; B-cells; myelomas.
                                                                                                                                                                                                                                                                                                                                                                                               Monoclonal antibodies to vascular anti-coagulating proteins - and hybridomas producing such antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (Updated on 10-MAR-2003 to add missing OS field.) (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 1590; DB 10;
Pred. No. 9.3e-139;
); Mismatches 1;
                                                                                                                                                                 1.320
/product-VAC-alpha protein
                                                             Vascular anti-coagulating protein-alpha.
                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                    Olsclosure; flg 1; 11pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            96.8%;
                                                                                                                                                                                                                                                                                                          (BOEH ) BOEHRINGER INGELHEIM
            (updated)
(updated)
(first entry)
                                                                                                                                                                                                                                                        88DE-3810331
                                                                                                                                                                                                                                                                                88DE-3810331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                              - Homo sapiens
                                                                                                                                                                                                                                                                                                                                                          WPI; 1989-293724/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      al Similarity
319; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  320 AA;
                                                                                                                                                                                                                                                                                                                                                                      N-PSDB; AAN91353
                                                                                                                                                                                                                                                        26-MAR-1988;
                                                                                                                                                                                                                                                                                26-MAR-1988;
                                                                                                                                                                                                       DE3810331-A.
          25-MAR-2003
10-MAR-2003
                                  30-JUL-1989
                                                                                                                                                                                                                                05-0CT-1989
                                                                                                                                                                                                                                                                                                                                   Sunther A;
                                                                                                                Chimeric
Chimeric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EP-181465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loca
Matches
셤
```

ö

Gaps

ö

63 9

à

g ò 셤 8 a ò

å

120

127

180

247

127

180 247

187

윱 ð

```
FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE
                                                         ELRAIKQVY EEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                               QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                 08-AUG-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ROSSO MF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2000-320664/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FR2784106-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       02-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 02-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-APR-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sanson A,
  89
                                                                                                                                                                                                                          308
                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                    AAY84788:
                            19
                                                        128
                                                                                  121
                                                                                                               188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Domain
                                                                                                                                                                                                                                                                                                RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Key
                                                                                                                                                                                                                                                                                                               AAY84788
                            δ
                                                                             q
                                                                                                            ŏ
                                                                                                                                       g
                                                                                                                                                                      ò
                                                                                                                                                                                           g
                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This sequence represents an example of a protein of the invention. The proteins are bifunctional Aequorea victoria green fluorescent protein (GFP)-annexin fusion proteins, where the GFP and annexin moieties provide greater or equal fluorescent intensity and anionic phospholipid binding affinity, respectively, than do the corresponding unfused GFP and annexin proteins. An early manifestation of apoptosis is the loss of the proteins. An early manifestation of apoptosis is the loss of the asymmetric distribution of plasma membrane phospholipids, which results in exposure of anionic phospholipids on the extracellular leaflet of the plasma membrane. The GFP-annexin V fusion proteins are used for the detection of apoptotic cells by flow cytometry or fluorescent microscopy. The fusion proteins provide for homogeneously labelled annexin, with fluorescence properties that do not change upon binding membrane phospholipids, unlike prior art FITC-labelled annexins, where quenching of FITC-annexin V fluorescence by 40-50% occurs upon binding phospholipid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
Gaps
                                                                                                                                                                                                                                                              GFP; green fluorescent protein; annexin; fusion protein; apoptosis; fluorescent intensity; anionic phospholipid binding affinity; asymmetric distribution; plasma membrane phospholipid;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bifunctional fusion protein useful for the detection of apoptotic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 1590; DB 20;
Pred. No. 9.3e-139;
0; Mismatches 1;
                                                                                                                                                                                                                                     S65T GFP variant/hAnnexin V protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 2; Page 14-15; 23pp; English.
                                                                                                                                                      AAY13923 standard; protein; 320 AA
                                                                KGDTSGDYKKALLLCGEDD 320
                                                      KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              96.8%;
llarity 99.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                    98WO-US21444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97US-0948276
                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                          apoptotic cell detection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (REGC ) UNIV CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-277634/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           al Similarity
319; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  320 AA;
                                                                                                                                                                                                                                                                                                                                      Aequorea victoria
                                                                                                                                                                                                                                                                                                                                                      sapiens.
                                                                                                                                                                                                                                                                                                                                                                                             WO9919470-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  09-OCT-1998;
                                                                                                                                                                                                          13-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                        22-APR-1999
                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          membranes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sednence
                                                                                                                                                                              AAY13923;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ernst JD;
                                                        308
                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cells
                                                                                                                                          AAY13923
                                                                                                                          RESULT
                                                                             g
                                                                                                                                                       ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             임
```

```
240
                                             Annexin; phospholipid; antithrombotic; antitumor; antiinflammatory; coating; thrombogenic blomaterial; labelling compound; negative charge.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     chemical
Chemical structure having affinity for phospholipid comprises chemical platform comprising six residues supporting set of chemical functions that are capable of binding to phospholipid .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present sequence represents an annexin polypeptide. The domain cannexin, which may be modified, is used to construct the chemical compounds of the invention. The specification describes chemical compounds which have an affinity for a phospholipid. The chemical compounds which have an affinity for a phospholipid. The chemical compounds which have a least one chemical platform comprising six residues supporting a set of chemical functions that are capable of binding to the phospholipid and at least partly define the affinity of the structure for the phospholipid. The compounds act as phospholipid sequesters. The compounds are useful for preparing antithrombotic, antitumor and antiniflammatory medicaments, for making coatings for thrombogenic biomaterials, and for preparing labelling compounds useful for analysing and detecting negative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Guerois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cordier OF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (COMS ) COMMISSARIAT ENERGIE ATOMIQUE. (UYPA-) UNIV CURIE PARIS VI P & M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                      AAY84788 standard; peptide; 320 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Neumann JM,
                                                                                                                                   KGDTSGDYKKALLLICGEDD 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16..91
/note= "domain 1"
                                                                                                                                                                                                                                                                                                                                          Amino acid sequence of annexin V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 13; Fig 6b; 63pp; French.
                                                                                                                  KGDTSGDYKKALLLLSGEDD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98FR-0012366.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98FR-0012366.
```

```
29-OCT-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-NOV-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-MAR-2003
01-NOV-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-JUN-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAP90053;
                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                             188
                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                    308
                                                                                                                                                                                             Query Match
  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                 용
                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                       ö
                                                                                                                                                                                             ELRAIKQVY EEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF 187
                                                                                                                                                                                   QAGELKWGTDEEKFIITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLLAV 247
                                                                                                                                                                                                                      VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 307
                                                                                                            FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 127
                                                                           67
                                                                                 New delta protein kinase C peptide for reducing or enhancing damage to cells or tissues exposed to ischemic or hypoxic event caused by stroke, or for protecting tissue from damage due to ischemia -
                                                                                                                                                                                                                                                                                                                                                                                         VI domain; vasotropic; cerebroprotective; deltavi-1; deltavi-2; RACK; pseudo-delta RACK; pseudo-delta receptor for activated C-kinase; deltavi-5; PKC; protein kinase C; signal transduction; cell growth; gene expression; ion channel activity; translocation; hypoxia; stroke; ischaemic damage; creatine kinase.
                                                                         8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention discloses peptides comprising deltaV1-1, deltaV1-2,
                                                        ö
                                     Length 320;
                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                               Human annexin V, containing a delta RACK binding site.
charges on cell surfaces and microvesicles in blood
                                   Score 1590; DB 21;
Pred. No. 9.3e-139;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRD ) UNIV LELAND STANFORD JUNIOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 45; Page 64-65; 65pp; English.
                                                                                                                                                                                                                                                                                                                         ABG31220 standard; Protein; 320 AA.
                                                                                                                                                                                                                                                                    KGDTSGDYKKALLLLCGEDD 320
                                                                                                                                                                                                                                                           KGDTSGDYKKALLLLSGEDD 327
                                   Query Match
Best Local Similarity 99.7%;
Matches 319; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-NOV-2001; 2001WO-US47556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-JAN-2001; 2001US-262060P
                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-599715/64
                   320 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             fochly-Rosen D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200257413-A2.
                                                                                                                                                                                                                                                                                                                                                              05-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-JUL-2002
                   Sequence
                                                                                                                              19
                                                                                                                                                128
                                                                                                                                                                                  188
                                                                                                                                                                                                                                                           308
                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                            ABG31220;
                                                                                                                                                                                                                                                                                                        RESULT 9
                                                                                                                                                                                                                                                                                                                 ABG3122(
                                                                                                                                                                                                                                                                                                                                           SXS
                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                         ò
                                                                         ò
                                                                                         셤
                                                                                                            ð
                                                                                                                            ð
                                                                                                                                               ò
                                                                                                                                                                9
                                                                                                                                                                                 ò
                                                                                                                                                                                                  셤
                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                          g
```

```
Signal transduction involved in a variety of cellular functions including signal transduction involved in a variety of cellular functions including cell growth, regulation of gene expression and ion channel activity. The localisation of different PKC isozymes to different areas of the cell in turn appears due to binding of the activated isozymes to the specific anchoring molecules (RACKS) Peptides that minic either the PKC-binding site on PKC are isozyme specific translocation inhibitors of PKC. The disclosed peptides are useful in crivating or inhibiting translocation or function of deltapKC. The deltapKC agonists or antagonists are useful in reducing, enhancing or protecting against damage to cells or tissues due to ischaemic or hypoxic event caused by stroke. Acute administration of the peptides, conjugated to a carrier peptide or a Tat-derived peptide, protected hearts against ischaemic damage as shown by decreased release of creatine kinase. The damage indicate that in an intext heart, inhibition of deltapKC conferred greater than 50% protection against ischaemic damage. The sequence greater than 50% protection against ischaemic damage. The sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL 60
deltaV1-5 or their
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ELRAIKOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96.8%; Score 1590; DB 23;
llarity 99.7%; Pred. No. 9.3e-139;
Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Anticoagulant; PP4 protein; thromboplastin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ź
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KGDTSGDYKKALLLCGEDD 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KGÖTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAP90053 standard; protein; 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       87DE-3737239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        88EP-0118039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (updated)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             anticoagulant PP4 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
Matches 319; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             320 AA;
```

```
Claim 2; Page 2-4; 20pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAP82317 standard; protein; 320
                                                                                                                                                                                                                                                                                                                                                                                                                                            KGDISGDYKKALLLCGEDD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     88WO-US00340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (updated)
(first entry)
                                                                                                                                                                                                  Query Match 96.7
Best Local Similarity 99.4
Matches 318; Conservative
          Sun J, Yang G;
                            2000-413098/36.
                                                                                                                                                                                600 AA;
                                      N-PSDB; AAA11241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-FEB-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-MAR-2003
13-NOV-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-AUG-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAP82317;
                                                                                                                                                                                                                                                                                                                                    401
                                                                                                                                                                                                                                                                                                                                                       188
                                                                                                                                                                                                                                                                                                                                                                                                                                 308
                                                                                                                                                                                  Sequence
          Wu X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                   윤
                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                            241 VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVWVSRSEIDLFRIRKEFRKNFATSLYSMI 300
                                                                                                                                                                                                                                                                                                        187
                                                                                                                                                                                                                                                                                                                 QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV 247
                                                                                                                                                                                                                                                                                                                                                                                VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 307
                                                                                                                                                                                                                                                                   68 FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE 127
                                                                                                                                                                                                                                        Annexin V; thrombocyte; carrier; thrombus; thrombolytic; fusion protein; urokinase; insect cell; fibrinolysis.
                                                                                                                                                                                                                                                                                                       ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                             8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                            ö
                                                                                                                                                                                        Length 320;
                                                     New DNA sequence encoding anticoagulant PP4 protein - and new recombinant protein, vectors, antibodies, etc., useful therapeutically and diagnostically.
                                                                                                                                                                                                            Indels
                                                                                                            Amino acid sequence of anticoagulant PP4 protein. This inhibits blood coagulation at the thromboplastin stage. (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                       Score 1587; DB 10;
Pred. No. 1.8e-138;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (SHAN-) SHANGHAI INST BIOCHEMISTRY CHINESE ACAD.
                                                                                           Claim 1; page 11 and Table 1; 12pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Annexin V/urokinase fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                KGDTSGDYKKALLLCGEDD 320
                                                                                                                                                                                                                                                                                                                                                                                                                       KGDTSGDYKKALLLLSGEDD 327
                  Kupper H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY92930 standard; Protein; 600
                                                                                                                                                                                      Query Match
Best Local Similarity 99.4%;
Matches 318; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99CN-0113524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99CN-0113524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
(BEHW ) BEHRINGWERKE AG
                                   WPI; 1989-166767/23
                                                                                                                                                                     320 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-OCT-2000
                  Grundmann U,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12-MAR-1999;
                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                            188
                                                                                                                                                                                                                                                                                                                                                                                                                      308
                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY92930;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                윱
                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                ò
```

```
400
                                                                                                                                                Annexin V, which has high affinity for active thrombocytes, is used as a carrier molecule to build a thrombus trageting thrombolytic fusion protein. The protein (this sequence) is the result of expression of a fusion gene comprising the Annexin V gene and a low-molecular urckinase gene, in insect cells. The Annexin V-scu-rap.32 fusion protein, expressed in insect cells train Th-5BI-4, has high affinity for active thrombocytes and has the fibrinolytic activity of urokinase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       521 VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   68 FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                461 QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEGLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVWVSRSEIDLFNIRKEFRKNFATSLYSMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
New thrombolytic fusion protein for targetting thrombus - comprises fusion of Annexin V and urokinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAP-I; anticoagulant; anti-inflammatory agent; phospholipid; phospholipase A2; disseminated intravacular coagulation; deep vein thrombosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAP-I isolated from biological fluid, used as anticoagulant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                           96.7%; Score 1587; DB 21;
99.4%; Pred. No. 4.3e-138;
iive 1; Mismatches 1;
```

œ

```
(KAGA ) KAGAKU OYOBI KESSEI RYOHO.
(KOWA ) KOWA CO LTD.
                                                                                                                                                       Disclosure; Page 2; 4pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                              96.5%;
                                      90JP-0328286
                                                        90JP-0328286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 99.7'
Matches, 318; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     I (CPB-I)
                                                                                                        WPI; 1992-288937/35.
                                                                                                                                                                                                                                           319 AA;
  JP04198195-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Calphobindin
                                      28-NOV-1990;
                                                         28-NOV-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JP05213769-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                    17-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-AUG-1993.
                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                            129
                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                 189
                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR41021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR41021;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 14
  g
                                                                                                                                                                                                                                                                                                                                                                                                                 ô
                                                                                                                                                                                                                                                                                                                                                                                                                                   임
                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                     임
                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                        187
                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                   247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 307
                                                                                                                                                                                                                                                                                                                     29
                                                                                                                                                                                                                                                                                                                                      9
                                                                                                      Human proteins having anticoagulant and antiinflammatory activity - isolated from biological fluid by anion-exchange chromatographoc media
                                                                                                                                                                                                                                                                                                                               128 ELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                                                                                                                                                       QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                    8 MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                   The protein does not contain a leader peptide sequence, indicating that PAP-I is probably not constitutively secreted. The Met residue is removed at in a post-translational event and the newly formed NH2-terminal An residue is blocked by acetylation. It binds to phospholipid and inhibits phopholipase A2. It binds to bushalipid and inhibits phopholipase A2. The protein can substitute heparin or other anticoagulants in the treatment of disseminated intravascular coagulation, deep vein thrombosis, or other disorders. It also has antiinflammatory
                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CPB-1; stabilisation; frozen; molten; processed; activity
                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                              Score 1586; DB 9;
Pred. No. 2.2e-138;
0; Mismatches 2;
                                                                                                                                                                                                                                         (Updated on 25-MAR-2003 to correct PA field.)
                                                         Carter BLA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                   Disclosure; Page ?; ?pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR26276 standard; protein; 319
                                                                                                                                                                                                                                                                             ery Match 96.6%;
sst Local Similarity 99.4%;
tches 318; Conservative (
87US-0011782
87US-0059355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (updated)
(first entry)
                           (ZYMO ) ZYMOGENETICS INC. (UNIW ) UNIV WASHINGTON.
                                                       Fujikawa K, Irani MH,
                                                                         WPI; 1988-235049/33.
N-PSDB; AAN82107.
                                                                                                                                                                                                                                                             320 AA;
06-FEB-1987;
05-JUN-1987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                 properties.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-MAR-2003
04-FEB-1993
                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                         89
                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                  188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR26276;
                                                                                                                                                                                                                                                                              Query Match
Best Local 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CPB-I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAR2627(
ŝ
                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
```

```
1 AQVLRGTVIDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            69 GRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9 AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                      The sequence given is the amino acid sequence of CPB-I. CPB-I was used within a method which involved adding basic amino acids to it which resulted in its stabilisation. This lead to the production of CPB-I which keeps its activity when it is frozen, molten or has been
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Calphobindin I; CPB-I; Protein kinase C; PKC; inhibition; tumour.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                        Length 319;
Stabilisation of CPB-1 for drug compsn. - by adding basic aminoacid selected from lysine, arginine and/or ornithine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                 processed by several procedures. (Updated on 10-MAR-2003 to add missing OS fleld.)
                                                                                                                                                                                                                                                                                                                                                                                                        Score 1585; DB 13;
Pred. No. 2.7e-138;
0; Mismatches 1;
```

180

ö

σ

```
26-FEB-2001; 2001JP-0050297
                                                                                                                                                                                                                                                                                           69
                                                                                                                                                                                                                                                                                                                                                                189
                                                                                                                                                                                                                                                                                                                                                                                                     249
                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                   Sednence
                                                                                                                                                                                                                                                                                                                                                                                                                                        309
                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Search con
Job time
                                                                                                                                                                                                                                                                                                                                                                                qq
ò
                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                        ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                 128
                                                                                                                                                                                                                                                                                                                     188
                                                                                                                                                                                                                                                                                                                                                         248
                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                              68
                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                         AGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVV
                                                                                                                                                                                                                                             9 AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLF
                                                                                                                                                                                                                                                       69 GRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEE
                                                                                                                                                                                                                                                                                           61 GRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEE
                                                                                                                                                                                                                                                                                                                    LRAIKOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQ
                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; CPB-I; eye drop; ophthalmological; anexin V; corneal disease;
calcium/phospholipid binding protein; polyhydric alcohol.
                                                                                                                                Calphobindin I (CPB-I) or recombinant calphobindin I (r-CPB-I) inhibits protein kinase C (PKC) and is useful in the treatment of mailgnant tumours caused by abnormal activation of PKC. CPB-I is extracted from human or animal organs and may be applied intravenously, orally, intramuscularly, percutaneously or rectally.
                                                                                                                                                                                                                            ö
                                                                                     Protein kinase C inhibitor effective against malignant tumours contg. (opt. recombinant) calphobindin I
                                                                                                                                                                                                         Length 319;
                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                         96.5%; Score 1585; DB 14; 99.7%; Pred. No. 2.7e-138; 1ve 0; Mismatches 1;
                                         (KOWA ) KOWA CO LTD.
(KAGA-) ZH KAGAKU OYOBI KESSEN RYOHO KENKYUSHO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABG32550 standard; protein; 319 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                        GDTSGDYKKALLLCGEDD 319
                                                                                                                  Claim 1; Page 2-3; 6pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                              GDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-FEB-2002; 2002WO-JP01563.
       92JP-0019032.
                        92JP-0019032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                  al Similarity 99.7
318; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human CPB-1 protein.
                                                                     WPI; 1993-299558/38
                                                                                                                                                                                        Sequence 319 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MO200267977-A1
       04-FEB-1992;
                        04-FEB-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-SEP-2002
                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                     129
                                                                                                                                                                                                                                                                                                                                                                                          249
                                                                                                                                                                                                                                                                                                                                                                                                                             309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABG32550;
                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                   Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ношо
                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABG32550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     õ
                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                            Q
```

```
128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241 KSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFHIFFHIHHHHHHHHHHHH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIK 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                            The invention relates to eye drops contain CPB-I (anexin V) and a polyhydric alcohol having a carbonyl value of not more than 5micro Mol./g. The eyes drops are for treating e.g. corneal diseases. Such eye drops are without unpleasant irritation upon dropping but with satisfactory long-term storage stability. The present sequence is the human CPB-I (calcium/phosphollpid binding) protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9 AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                 Eye drops for treating e.g. corneal diseases, contain CPB-1 and polyhydric alcohol with specific carbonyl value, without unpleasant irritation upon dropping but with satisfactory long-term storability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 1585; DB 23; Length 319;
Pred. No. 2.7e-138;
0; Mismatches 1; Indels 0
                                                                         Ë
                                                                                                                                                                                                                                                                 Disclosure; Page 13-14; 16pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              completed: August 22, 2003, 21:33:07
ne : 39 secs
                                                                         Inagi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GDTSGDYKKALLLLSGEDD 327
(KOWA ) KOWA CO LTD.
(KAGA ) CHEMO-SERO-THERAPEUTIC
                                                                      Shinoda Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 318; Conservative
                                                                                                                    WPI; 2002-674988/72
                                                                         Naruse H, Sano M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   319 AA;
```

ö

THIS PAGE BLANK (USPTO)

```
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd
```

OM protein - protein search, using sw model

August 22, 2003, 21:20:42; Search time 8.66667 Seconds (without alignments) 1774.354 Million cell updates/sec Run on:

1642 1 MACGCGHMAQVLRGTVTDFP. 9-696-016-60-sn Title: Perfect score:

......KGDTSGDYKKALLLLSGEDD 327 Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

127863 segs, 47026705 residues Searched:

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution. SwissProt_41:*

P08758 homo sapien P087287 bos taurus P48036 mus musculu P70075 cynops pyrr P08133 dallus gall P70075 cynops pyrr P08133 homo sapien P08132 sus scrofa P48037 rattus norv P97429 mus musculu P55506 rattus norv P27214 bos taurus P57304 mus musculu P55506 rattus norv P77214 bos taurus P57304 mus musculu P55306 mus musculu P55308 mus musculu P13228 homo sapien P13228 homo sapien P1328 homo sapien P1324 homo sapien P13429 homo sapien P26556 hydra atten P26556 hydra atten P97355 homo sapien P07355 bos taurus P7314 bos taurus P26556 hydra atten P97355 homo sapien P07355 bos taurus Description SUMMARIES ANX5_BOVIN
ANX5_BOVIN
ANX5_BOVIN
ANX5_CHICK
ANX5_CHICK
ANX6_BUMAN
ANX6_BUMAN
ANX6_BUMAN
ANX6_BUMAN
ANX6_BUMAN
ANX4_BOVIN
ANX4_BOVIN
ANX4_CANFA
ANX6_CHICK
ANX4_CANFA
ANX6_CHICK
ANX4_CANFA
ANX4_BOVIN ANXB_RABIT ANXB_HUMAN ANXB_MOUSE ANX8_MOUSE ANX8_HUMAN ANX3_HUMAN ANX3_MOUSE ANX7_HUMAN ANX7_MOUSE ANX3_RAT HYDAT DROME % Query Match Length DB Score Result Š

Q07936 rattus norv	P07356 mus musculu	P22465 drosophila	P27216 homo sapien	P27006 xenopus lae	Q29471 canis famil	P17785 gallus gall	P24801 xenopus lae	P51662 oryctolagus	P14087 cavia cutle	P04083 homo sapien	P46193 bos taurus
ANX2_RAT	ANX2_MOUSE	ANXX_DROME	ANXD HUMAN	ANXB_XENLA	ANXD_CANFA	ANX2_CHICK	ANX2_XENLA	ANX1_RABIT	ANX1_CAVCU .	ANX1_HUMAN	ANX1_BOVIN
-	٦	-	-	-	-	-			_	_	,
338	338	320	315	339	315	338	339	346	346	345	346
42.2	42.1	41.7	41.4	41.1	40.9	40.6	40.3	39.5	39.5	39.2	39.2
	1.5	85.5	619	675.5	671	666.5	662.5	649	648	643	643
693	69	Ф									

ALIGNMENTS

RA Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L., RA Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L., RA Browning J.L., Chow E.P., Burne C., Huang KS., Pratt D., Wachter L., RA Hession C., Frey A.Z., Wallner B.P.; RY Five distinct calcium and phospholipid binding proteins share homology with lipocortin 1.*; RI J. Biol. Chem. 263:10799-10811(1988). RN FOURNE FROM N. A. RAD SEQUENCE RA FINANCOSH T., Hendrickson L.E., McMullen B.A., Fujikawa K.; RY Primary structure of human placental anticoagulant protein."; RY Primary structure of human placental anticoagulant protein."; RN FOURNE FROM N.A., AND SEQUENCE. RX MEDLINE-88193078; pubmed-2963810; RX MEDLINE-88193078; pubmed-2963810; RA Mizoguchi T., Sato F., Yoshizaki H., Hirata M., Miyata T., RA Shidara Y., Murata M., Maki M.; RY Structure and expression of CDNA for an inhibitor of blood	X5_HUMAN ANX5_HUMAN P08758; 01-NOV-1988 (F 01-NOV-1988 (F 15-SEP-2003 (F Annexin A5 (CBP-I) (Place (Thromboplasti (Ancontorin CII)	RESULT 1
	Homo sapiens Eukaryota; Met Mammalia; Euth NCBL_TaxID=96 [1] SEQUENCE FROM MEDLINE-882344 Grundmann U.	ANYS_HUMAN ANXS_HUMAN ANXS_HUMAN STANDARD; D1-NOY-1988 (Rel. 09, Created) O1-NOY-1988 (Rel. 09, Last sequence update) O1-NOY-1988 (Rel. 09, Last sequence update) I5-SEP-2003 (Rel. 42, Last sequence update) I5-SEP-2003 (Rel. 09, Last sequence update) I5-SEP-2003 (Rel. 09, Last sequence update) I5-SEP-2003 (Rel. 09, Last sequence update) Anchorin CII) Homo sapiens (Human) Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Butele Eukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo. NCBI_TaxID=9606; [1] SEQUENCE FROM NA. MEDLINE=88234495; PubMed=2967495; Garndmann U., Abel KJ., Bohn H., Loebermann H., Lottspei
	COUNTY OF CHANG	AS_HUMAN **ANYS_HUMAN **STANDARD; **D08758; **O1-NOY-1988 (Rel. 09, Created) **O1-NOY-1988 (Rel. 09, Last sequence update) **IS-SEP-2003 (Rel. 42, Last sequence update) **IS-SEP-2003 (Rel. 42, Last annotation update) **Annexin AS (Amexin V) (Lipcocrtin V) (Endonexin II) (Calp (CBP-I) (Placental anticoagulant protein I) (PAP-I) (Thromboplastin inhibitor) (Vascular anticoagulant-alpha) (Anchorin CII). **Anchorin CII). **ANAS OR ENX2 OR PP4.

```
MEDLINE-91065314; PubMed-2147412;
    RC TISSUE-MUST, FOUR NAT, and Skin;

RX SEVENACE FROM NAT,

RA STEAUSDEGE,

RA STEAUSDEGE R., Fedingold E.A., Grouse L.H., Derge J.G.,

RA STEAUSDEGE R.L., Fedingold E.A., Grouse L.H., Derge J.G.,

RA Altschul S.F. Zeeberg B., Budder L., Schaffer C.F., Bhat N.K.,

RA Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hisleh F.,

RA Altschul M.J., Bordan H., Moore T., Max S.I., Wang J., Hisleh F.,

RA Didtchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Didtchenko L., Warns M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Brownstein M.J., Usdin T.B., Toshlyuki S., Carninci P., Prange C.,

RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RA Robards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.M.,

RA Nillalon D.K., Muzzy D.M., Sodergren E.J., Lu X., Glibs R.A.,

RA Hilting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Miyers R.M.,

R Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

RA Schnerch A., Schein J.B., Jones S.J.M., Marra M.A.;

R Generation and initial analysis of more than 15,000 full-length

RI Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Sedimentation equilibrium analysis of five lipocortin-related phospholipease A2 inhibitors from human placenta. Evidence against a mechanistically relevant association between enzyme and inhibitor."; J. Biol. Chem. 263:18657-18663(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ahn N.G., Teller D.C., Blenkowski M.J., McMullen B.A., Lipkin E.W., de Haen C.,
                                                      Kaplan R., Jaye M., Burgess W.H., Schlaepfer D.D., Haigler H.T.;
*Cloning and expression of cDNA for human endonexin II, a Ca2+ and
phospholipid binding protein "."
J. Biol. Chem. 263:8037-8043(1988).
                                                                                                                                                     MEDLINE-95047484; PubMed-7958998;
Fernandez M.P., Morgan R.O., Fernandez M.R., Carcedo M.T.;
The gene encodding human annexin V has a TATA-less promoter with in the Gene Accontent.";
Migh G+C content.";
Gene 149:253-260(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE-90088443; PubMed-2532007;
Rothhut R., Comera C., Cortial S., Haumont P.-Y., Diep Le K.H., Cavadore J.-C., Conard J., Russo-Marie F., Lederer F.;
**A 32 kba lipocortin from human mononuclear cells appears to be identical with the placental inhibitor of blood coagulation.*;
**Biochem. J. 263:929-935(1989)
                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
MEDLINE-94307733; PubMed-8034319;
Cookson B.T., Engelhardt S., Smith C., Bamford H.A., Prochazka
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE OF 85-130; 258-296 AND 299-319.
MEDLINE-87317598; PubMed-2957692;
Schlaepfer D.D., Mehlman T., Burgess W.H., Haigler H.T.,
"Structural and functional characterization of endonexin II,
calcium- and phospholipid-binding protein.";
Proc. Natl. Acad. Sci. U.S.A. 84:6078-6082(1987).
                                                                                                                                                                                                                                                                                                 Organization of the human annexin V (ANX5) gene.";
                                       MEDLINE-88228020; PubMed-2967291;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE OF 84-92.
MEDLINE-89066652; PubMed-2974032;
Biochem. 102:1261-1273(1987).
                                                                                                                                                                                                                                                                                                                 Genomics 20:463-467(1994).
                                                                                                                           SEQUENCE FROM N.A.
                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PARTIAL SEQUENCE.
                                                                                                                                                                                                                                                                                     Tait J.F.;
```

K-RAY CRYSTALLOGRAPHY (2.5 ANGSTROMS)

```
N FAY CRYSTALLOGRAPHY (2.3 ANGSTROMS).

NEDLINE-98118533; PubMed-9435213;

NEDLINE-98118533; PubMed-9435213;

NEDLINE-98118533; PubMed-9435213;

NEDLINE-98118533; PubMed-9435213;

R Buddsa N., Minks C., Medrano F.J., Lutz J., Huber R., Moroder L.;

RT Buddsa N., Minks C., Medrano F.J., Lutz J., Huber R., Moroder L.;

RT and stability of the per-fulaproline mutant of annexin V.";

RT and stability of the per-fulaproline mutant of annexin V.";

Proc. Natl. Acad. Sci. U. S.A. 95:455-459(1998).

C. I FUNCTION: THIS PROTEIN IS AN ANTICOAGULANT PROTEIN THAT ACTS AS

AN INDIRECT INHIBITOR OF THE THROMBOPLARTIN SPECIFIC COMPLEX,

WHICH IS INVOLVED IN THE BLOOD COAGULATION CASCADE.

C. I SUBUNIT: MONOMER. BINDS ATRX (By similarity).

C. SUBUNIT: MONOMER. BINDS ATRX (By similarity).

C. SUBUNIT: BELONGS TO THE ANNEXIN FAMILY.

C. SIMILARITY: Confirains 4 annexin repeats.

C. SIMILARITY: Confirains 4 annexin repeats.

C. SEVEN GROUPS UNDER DIFFERENT NAMES!

C. SEVEN GROUPS UNDER DIFFERENT NAMES!

C. SEVEN GROUPS UNDER DIFFERENT NAMES!

C. SEVEN GROUPS UNDER SERENS COLOMOSPY 91stebullder.asp?bddyld-185".
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bloinformatics and the EMBL outstation the European Bloinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                               X-RAY CRYSTALLOGRAPHY (2.0 ANGSTROMS).
MEDLINE-2317413; Pubmed-1311770;
Huber R., Berendes R., Burger A., Schneider M., Karshikov A.,
Luecke H., Roemisch J., Paques E.-P.;
"Crystal and molecular structure of human annexin V after refinement.
Implications for structure, membrane binding and ion channel
formation of the annexin family of proteins.";
J. Mol. Biol. 223:683-704(1992).
                                                                                                                                                                                                       MEDLINE=91085549; PubMed=2148156;
Huber R., Schnedder M., Mayr I., Roemisch J., Paques E.-P.;
The calcium binding sites in human annexin V by crystal structure
analysis at 2.0-A resolution. Implications for membrane binding and
calcium channel activity.";
FEBS Lett. 275:15-21(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE-98062249; PubMed-9398511;
Kaneko N., Ago H., Matsuda R., Inagaki E., Miyano M.;
"Crystal structure of annexin V with its ligand K-201 as a calcium
Huber R., Roemisch J., Paques E.-P.;
"The crystal and molecular structure of human annexin V, an anticoagulant protein that binds to calcium and membranes.";
EMBO J. 9:3867-3844 (1990).
                                                                                                                                                                              X-RAY CRYSTALLOGRAPHY (2.0 ANGSTROMS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    x-RAY CRYSTALLOGRAPHY (3.0 ANGSTROMS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOINED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        channel activity inhibitor.";
J. Mol. Biol. 274:16-20(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; X12454; CAA30985.1; -. EMBL; M19384; AAB59545.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              M18366; AAA35570.1; +.
M21731; AAA36166.1; -.
D00172; BAA00122.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAB40047.1;
AAB40047.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAB40047.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAB40047.1;
AAB40047.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  J03745; AAA52386.1;
U01691; AAB40047.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAB40047.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAB40047.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAB40047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         U01689;
U01690;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         001681;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                001687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL;
EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL;
EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 [16]
```

Ĥ

```
ANXAS OR ANXS
          Annexin; Cald
Acetylation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ANX5_MOUSE
P48036;
                                                                                                   VARIANT
VARIANT
SEQUENCE
                                INIT_MET
REPEAT
                                                                                                                                                                                            φ
                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                    129
                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                  189
                                                                                                                                                                                                                                                                                                                                                                              249
                                                                                                                                                                                                                                                                                                                                                                                                                            309
                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                               Query Match
                                                                                        MOD_RES
                                                                                                                                                            Local
                                                     REPEAT
REPEAT
REPEAT
                                                                                                                                                           Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ANX5_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT
셤
                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                          ď
                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                 ò
                                ö
                                                                                                                                                                                         248
                                                                                                   128
                                                                                                                                                188
                                                                                                                                                          120
                                                                                                                                                                                                                                      KSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIK 308
                                                       68
                                                                           9
                                                                                               AGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVV
                                                                                                                                                                                                     LRAIKOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQ
                                                     AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLF
                                                                15-DEC-1998 (Rel. 37, Created)
15-DEC-1998 (Rel. 37, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
16-SEP-2003 (Rel. 40, Libocortin V) (Endonexin II) (Calphobindin I)
(CBP-I) (Placental anticoagulant protein I) (PAP-I) (PP4)
(Thromboplastin inhibitor) (Vascular anticoagulant-alpha) (VAC-alpha)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Blochin. Biophys. Acta 1160:76-83(1992).

-!- FUNCTION: THIS PROTEIN IS AN ANTICOAGULANT PROTEIN THAT ACTS AS AN INDIRECT INHIBITOR OF THE THOMBODLEASTIN-SPECIFIC COMPLEX, WHICH IS INVOLVED IN THE BLOOD COAGULATION CASCADE.

-!- SUBUNIT: MONOMER. BINDS ATRX (By similarity).

-!- DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.

-!- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bos taurus (Bovine).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE-Brain;

BEDINE-93041974; PubMed-1420335;

Learmouth M.P., Howell S.A., Harris A.C.M., Amess B., Patel Y.,

Glambanco I., Blanchi R., Pula G., Ceccarelli P., Donato R.,

Green B.N., Aitken A.;

Novel isoforms of CaBP 33/37 (annexin V).from mammalian brain:

structural and phosphorylation differences that suggest distinct

biological roles:
                                ö
          Length 319;
                                Indels
        Score 1585; DB 1;
Pred. No. 1e-95;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                  320 AA
                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                               GDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      interPro; IPR001464; Annexin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PD000143; Annexin; 4.
       Query Match
Best Local Similarity 99.7%;
Matches 318; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfam; PF00191; annexin; 4. PRINTS; PR00196; ANNEXIN.
                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SMART; SM00335; ANX; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bovidae; Bovinae; Bos
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PIR; S27214; S27214.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HSSP; P08758; 1ANW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID-9913;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          (Anchorin CII)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ANXA5 OR ANX5
                                                                                                                                                                                                                                                                                                                                                                 ANX5_BOVIN
                                                                                                                                                                                                                                      249
                                                    σ
                                                                                                                                             129
                                                                                                                                                                  121
                                                                                                                                                                                         189
                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                   309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ProDom;
                                                                                                                                                                                                                                                                                                                                                       ANX5_BOVIN
                                                                                                                                                                                                                                                                                                                                          RESULT 2
                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                               ò
                                                                                                                      a
                                                                                                                                                                g
                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                         g
                                                                                                                                             ŝ
                                                                                                                                                                                        ò
                                                                                                                                                                                                           g
                                                                                                                                                                                                                                    ö
                                                     å
                                                                                                                                                                                                                                                                                   ð
```

```
AGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVV 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              69 GRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEE 128
                                                                                                                                                                                                                                                                                                                                                                                     LRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQ 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIK 308
                                                                                                                                                                                                                                                              89
                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                              01-FEB-1996 (Rel. 33, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Annexin A5 (Annexin V) (Lipocortin V) (Endonexin II) (Calphobindin I) (CBP-I) (Placental anticoagulant protein I) (PAP-I) (PP4)
(Thromboplastin inhibitor) (Vascular anticoagulant-alpha) (VAC-alpha)
                                                                                                                                                                                                                                                              AQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLF
                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
              Calcium/phospholipid-binding; Repeat; Blood coagulation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    M.P.;
                                                                                                                                                                                                                                  ï
                                                                                                                                                                                                  Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEGUENCE FROM N.A.
Adachi T., Kojima K., Fukuoka S.-I., Ogawa H., Matsumoto I.;
Submitted (AUG-1995) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fernandez
                                                                                                                                                                                                 Score 1536.5; DB 1; Length
Pred. No. 1.4e-92;
5; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rodriguez-Garcia M.I., Kozak C.A., Morgan R.O., Fernandez
"Mouse annexin V chromosomal localization, cDNA sequence
conservation, and molecular evolution.";
Genomics 31:157(1996).
                                                                                                                        ACETYLATION (BY SIMILARITY)
                                                                                                                                                                     50FCE18E95F19CB0 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ā.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    319
                                                           ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
                                                                                                                                        S -> T.
K -> E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE-Peritoneal cavity;
MEDLINE-96422179; Pubmed-8824796;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GDTSGDYKKALLLL-SGEDD 327
                                                         83
155
239
314
1 A
1 C
125
8 S
3642 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-FEB-1996 (Rel. 33, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              [3]
SEQUENCE FROM N.A.
STRAIN=129/SvJ; TISSUE=Liver;
                                                                                                                                                                                                  93.68;
PROSITE; PS00223; ANNEXIN;
                                                                                                                                                                                                                              309; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD;
                                                                                                                                                                    320 AA;
                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=10090;
```

```
transcripts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             components.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ANX5_RAT
P14668;
                                                        253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              changes.
                                                                                                                                                                                                                                                                                                                                                                                      RESULT 4
                                                                                                                       q
                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A COCCOO COCOO COCCOO C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the European Bioinformatics. There are no restrictions on its use by non-profit institutions as inn as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KOVYEBEYGSSLEDDVVGDTSGYYORMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1; Gaps
                                                                                                                                                                                                                     FUNCTION: THIS PROTEIN IS AN ANTICOAGULANT PROTEIN THAT ACTS AS AN INDIRECT INHIBITOR OF THE THROMBOPLASTIN-SPECIFIC COMPLEX, WHICH IS INVOLVED IN THE BLOOD COAGULATION CASCADE.
SUBUNIT: MONOMER. BINDS ATRX (By similarity)
DOMAIN: A PAIr of annoxin repeats may form one binding site for calcium and phospholipid.
SIMILARITY: CONTAINS A ANNEXIN FAMILY.
SIMILARITY: CONTAINS 4 annexin repeats.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium/phospholipid-binding; Repeat; Blood coagulation;
MEDLINE-99072820; PubMed-9854034;
Rodriguez-Garcia M.I., Morgan R.O., Fernandez M.R., Bances P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90.1%; Score 1479.5; DB 1; Length 319; 93.7%; Pred. No. 6.6e-89;
                                                                                                            "Mouse annexin V genomic organization includes an endogenous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             55055BAF2E1C36B7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL, D63423; BAA09728.1; -
EMBL, AJ230110; CAA13092.1; -
EMBL, AJ230110; CAA13092.1; JOINED.
EMBL, AJ230111; CAA13092.1; JOINED.
EMBL, AJ230114; CAA13092.1; JOINED.
EMBL, AJ230116; CAA13092.1; JOINED.
EMBL, AJ230118; CAA13092.1; JOINED.
EMBL, AJ230120; CAA13092.1; JOINED.
EMBL, AJ230121; CAA13092.1; JOINED.
EMBL, AJ230122; CAA13092.1; JOINED.
EMBL, AJ230123; CAA13092.1; JOINED.
EMBL, AJ230124; CAA13092.1; JOINED.
EMBL, AJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ANNEXIN 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22 82 AN
94 154 AN
178 238 AN
253 313 AN
319 AA; 35752 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pfam; PF00191; annexin; 4.
PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                     retrovirus.";
J. Blochem. 337:125-131(1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; U29396; AAC52530.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SMART; SM00335; ANX; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           296;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Placenta.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
       RRAPANA RAPANA R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
```

```
SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                    244 SIPAYLAETLYYAMKGAGTDDHTLIRVYVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-SEP-2003 (Rel. 36, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Annexin A5 (Annexin V) (Lipocortin V) (Endonexin II) (Calphobindin I)
(CBP-I) (Placental anticoagulant protein I) (PAP-I) (PAP)
(Thromboplastin inhibitor) (Vascular anticoagulant-alpha) (VAC-alpha)
ANAK5 OR ANX5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INTERACTION WITH DNWTI.
STRAIN-Wistar; TISSUE-Brain;
MEDLINE-950301899; PubMed-8667030;
Ohaswa K., Imal Y., Ito D., Kohaaka S.;
"Molecular cloning and characterization of annexin V-binding proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Swairjo M.A., Concha N.O., Kaetzel M.A., Dedman J.R., Seaton B.A.;
"Ca(f.+)-bridging mechanism and phospholipid head group recognition in
the membrane-binding protein annexin V.";
Nat. Struct. Biol. 2:968-974(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ü
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        X-RAY CRYSTALLOGRAPHY (2.0 ANGSTROMS) OF 2-319.
MEDLINE-98272673; PubMed-9609693;
MEDLINE-98272673; PubMed-9609693;
MEDLINE-981, MO Y.D., Mealy T.R., LI C.W., Swairjo M.A., Balch C., Head J.F., Retzinger G., Dedmon J.R., Seaton B.A.;
"Mutational and crystallographic analyses of interfacial residues annexin V suggest direct interactions with phospholipid membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ima1 Y., Kohsaka S.;
*Structure of rat annexin V gene and molecular diversity of its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            X-RAY CRYSTALLOGRAPHY (1.9 ANGSTROMS).
MEDLINE-93369587; PubMed-8362244;
Concha N.O., Head J.F., Kaetzel M.A., Dedman J.R., Seaton B.A.;
"Rat annexin V crystal structure: Ca(2+)-induced conformational
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE-88273202; PubMed=2968983; Peptisky R.B., Tizard R., Mattallano R.J., Sinclair L.K., Miller G.T., Browning J.L., Chow E.P., Burne C., Huang K.S., Pratt D., Wachter L., Hession C., Frey A.Z., Wallher B.P.; Frey A.Z., Wallher B.P.; Pratt D., Wachter L., Hession C., Frey A.Z., Wallher B.P.; Machter L., Hession C., Frey A.Z., Wallher B.P.; Pratt D., Wachter L., Hession C., Frey A.Z., Wallher B.P.; Pratt D., Wachter L., Hession C., Frey A.Z., Wallher B.P.; Pratt D., Waller B.D.; Pratt D., Waller B., Waller B., Waller B.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     318 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      X-RAY CRYSTALLOGRAPHY (1.9 ANGSTROMS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eur. J. Biochem. 232:327-334(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE-Kidney;
MEDLINE-96069783; PubMed-7583670;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE-96035863; Pubmed-7556178;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Biochemistry 37:8004-8010(1998).
                                                                                                                                                                                                                                                                                                                                              304 GDYKKALLLCGGEDD 319
                                                                                                                                                                                                                                                            313 GDYKKALLLL-SGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Science 261:1321-1324(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID-10116;
```

```
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                           SUGGEST SEQUENCING ERROR
                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                                                                                                                                                                                  Gallus gallus (Chicken).
188
200
218
228
244
263
274
293
318 AA;
                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                      (Anchorin CII).
                                                                                                                                                                                                                                                                                                                                            ANXAS OR ANXS
                                                                            Query Match
Best Local Simi
Matches 291;
                                                                                                                                                                                                                                                                                ANXS_CHICK
P17153;
                                                   HELIX
HELIX
SEQUENCE
                                                                                                                                                                                                           252
                                                                                                                                                                                                                                     312
             HELIX
HELIX
HELIX
HELIX
                                                                                                                                                                                                                                                                           ANX5_CHICK
                                                                                                                                                                                                                                                                                        SCHELLER
                                                                                                                 요
                                                                                                                                           셤
                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                 셤
                                                                                                      ö
                                                                                                                               ð
                                                                                                                                                         ò
                                                                                                                                                                     셤
                                                                                                                                                                                  ò
                                                                                                                                                                                              셤
                                                                                                                                                                                                            Öζ
                                                                    This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see http://www.isb-sib.ch/announce/or send an email to licenseelsb-sib.ch).
  PROSITE; PS00223; ANNEXIN; 4.
PROSITE; PS00223; ANNEXIN; 4.
Placenta; Calcium/phospholipid-binding; Repeat; Blood coagulation; Placenta; Acetylation; 3D-structure.
INIT_MET
with highly hydrophilic peptide structure.";
                                                                                                                                                                                                                                                                                                                                                 ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
                                                                                                                                          JOINED.
JOINED.
JOINED.
                                                                                                                                                                    JOINED.
JOINED.
                                                                                                                                   BAA07708.1; JOINED. BAA07708.1; JOINED.
                                                                                                                                                                                                                                                                                                   PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                        InterPro; IPR001464; Annexin.
                                                                                                                                                      BAA07708.1;
BAA07708.1;
BAA07708.1;
BAA07708.1;
BAA07708.1;
                                                                                                                                                                                                                                                                                              Pfam; PF00191; annexin; 4.
                                                                                                                      EMBL; M21730; AAA41512.1;
EMBL; D42137; BAA07708.1;
                                                                                                                                                 BAA07708.1;
                                                                                                                                                                                                                                                                                                                                                                            111
233
339
341
411
82
82
82
82
                                                                                                                                                                                                                                                                                                                  SMART; SM00335; ANX; 4
                                                                                                                                                                                                                                     13-JAN-99.
                                                                                                                                                                                                                                                 13-JAN-99.
13-JAN-99.
                                                                                                                                                                                                                                                                                 04-FEB-03
                                                                                                                                                                                                                                                              13-MAR-02
                                                                                                                                                                                                                                                                           04-FEB-03
                                                                                                                                                                                                     2RAN; 30-NOV-94
                                                                                                                                                                                                                        13-JAN-99
                                                                                                                                                                                                                                                                     04-FEB-03
                                                                                                                                                  D63337;
                                                                                                                                                        D42131;
                                                                                                                                           D42130;
                                                                                                                                                                                                                                                                                PDB; 1N44;
                                                                                                                                                                                                                                           1BCW;
                                                                                                                                                                                                                        1BC0;
                                                                                                                                                                                                                                                                                                                                                 REPEAT
REPEAT
REPEAT
REPEAT
MOD_RES
TURN
HELIX
HELIX
                                                                                                                                           EMBL;
EMBL;
                                                                                                                                                                     EMBL;
EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HELIX
                                                                                                                                                                                        EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                           HELIX
HELIX
                                                                                                                                                         MBL;
                                                                                                                                                                MBL;
                                                                                                                                                                                                                                                                                                                                                                                                     TURN
                                                                                                                                                                                                                                                                                                                                                                                                                                                               LURN
```

```
131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  311
                                                                                                                                                                                                                                                                                                            62 LVNDMKSELTGKPEKLIVALMKPSRLYDAYELKHALKGAGTDEKVLTEITASRTPEELRA 121
                                                                                                                                                                                                                                                                                                                                                                                           132 IKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGE 191
                                                                                                                                                                                                                                                                                                                                                                                                                        71
                                                                                                                                                                                                                    61
                                                                                                                                                                                             2 LRGTVTDFSGFDGRADAEVLRKAMKGLGTDEDSILNLLTARSNAQRQOIAEBFKTLFGRD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-FEB-1996 (Rel. 33, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Annexin A5 (Annexin V) (Lipocortin V) (Endonexin II) (Calphobindin I)
(CBP-I) (Placental anticoaqulant protein I) (PAP-I) (PP4)
(Thromboplastin inhibitor) (Vascular anticoaqulant-alpha) (VAC-alpha)
                                                                                                                                                                12 LRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRD
                                                                                                                                                                                                                                                                               72 LLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKCAGTNEKVLTEIIASRTPEELRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         192 LKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
Gallus.
                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
MEDLINE-88186917; PubMed-2833522;
Fernandez M.P., Selmin O., Martin G.R., Yamada Y., Pfaeffle M.,
Deutzmann R., Mollenhauer J., von der Mark R.;
"The structure of anchorin CII, a collagen binding protein isolated
from chondrocyte membrane.";
                                                                                                           1;
                                                 ; Score 1455.5; DB 1; Length 318; 
; Pred. No. 2.3e-87; 
12; Mismatches 13; Indels 1;
35613 MW; 1A755A7C11FA11CE CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE-90020458; PubMed-2552626;
Moss S.E., Crumpton M.J.;
"Alternative splicing or cloning artefact?";
trends Blochem. Scl. 14:325-325(1989).
[3]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  321 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Biol. Chem. 263:5921-5925(1988)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              302 SGDYKKALLLCGGEDD 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-AUG-1990 (Rel. 15, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SGDYKKALLLL-SGEDD 327
                                                       88,6%;
91.8%;
```

```
STANDARD;
                                                                                                                                                                                                                                  306 3
321 AA;
                                                                                                                                                                                                                                                                               Best Local Similarity
Matches 250; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=8330;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE-Testis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ANXS_CYNPY
P70075;
                                                                                                                                                                                                                                                                                                                                                        89
                                                                                                                                                                                                                                                                                                                                                                                               128
                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                     Query Match
                        HELIX
HELIX
                                                       HELIX
HELIX
HELIX
                                                                                       HELIX
HELIX
TURN
                                                                                                                      HELIX
TURN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 6
ANX5_CYNPY
                                                                                                                                                                         HELIX
                                                                                                                                                                                    HELIX
                                                                                                                                                                                                                 HELIX
HELIX
                                                                                                                                                      HELIX
                                             URN
                                                                                                                                           HELIX
                                                                                                                                                                                                       IURN
    à
                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                               This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isp-sib.ch).
REVISIONS.
MEDLINE-90243721; PubMed=2159478;
Pernandez M.P., Selmin O., Martin G.R., Yamada Y., Pfaeffle M.,
Pernandez M.P., Solmin O., worden Wark K.;
The structure of anchorur J., von der Mark K.;
"The structure of anchorur GII, a collagen binding protein isolated from chondrocyte membrane.";
J. Blol. Chem. 265:8344-8344(1990).
                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
STRAIN-White leghorn; TISSUE-Liver;
STRAIN-White leghorn; TISSUE-Liver;
STRAIN-94215900; PubMed-8163186;
Fernandez M.P., Fernandez M.R., Morgan R.O.;
"Structure of the gene encoding anchorin CII (chick annexin V).";
Gene 141:179-186(1994).
                                                                                                                                                                                                                       TISSUE-Liver;
WEDLINE-93249384; PubMed-8484740;
WEDLINE-93249384; PubMed-8484740;
WEDLINE-93249384; PubMed-8484740;
MEDLINE-93249384; PubMed-8484740;
"Isolation, characterization and localization of annexin V from chicken liver";
                                                                                                 Fernandez M.P., Selmin O.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Calcium/phospholipid-binding, Repeat, 3D-structure.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -> E (IN REF. 1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.*
D -> E (IN 1
                                                                                  REVISIONS.
Principle M., Ruggiero F., Hofmann H., Pe
Yamada Y., Garrone R., von der Mark K.,
EMBO J. 9:1336-1336(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL, M30971; AAA48591.1; ALT_SEQ. EMBL; U01680; AAB39917.1; CEMBL; U01671; AAB39917.1; JOINED. EMBL; U01672; AAB39917.1; JOINED. EMBL; U01673; AAB39917.1; JOINED. EMBL; U01675; AAB39917.1; JOINED. EMBL; U01676; AAB39917.1; JOINED. EMBL; U01677; AAB39917.1; JOINED. EMBL; U01677; AAB39917.1; JOINED. EMBL; U01677; AAB39917.1; JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAB39917.1; JOINED AAB39917.1; JOINED
                                                                                                                                                                                                                                                                  chicken liver.";
Biochem. J. 291:601-608(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               InterPro; IPR001464; Annexin.
Pfam; PF00191; annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SMART; SM00335; ANX; 4.
PROSITE; PS00223; ANNEXIN; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PIR; A35381; LUCH5.
PDB; 1ALA; 31-OCT-93.
                                                                                                                                                                                                                PARTIAL SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; U01679;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Annexin; (
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REPEAT
REPEAT
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TURN
```

```
ö
                                                                                                                                                                                                                           127
                                                                                                                                                                                                                                                61 FGRDLVDDLKSELTGKFETLMVSLMRPARIFDAHALKHAIKGAGTNEKVLTEILASRTPA 120
                                                                                                                                                                                                                                                                                                              187
                                                                                                                                                                                                                                                                                                                                     247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI 307
                                                                                                                                   69
                                                                                                                                                                               9
                                                                                                                               FGRDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPE
                                                                                                                                                                                                                                                                                                                   ELRAIKOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALF
                                                                                                                                                                                                                                                                                                                                                                                                    188 QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV
                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostoml, Amphibia, Batrachia, Caudata, Salamandroidea, Salamandridae, Cynops
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        **Tamanoto T., Hikono T., Abe S.I.;
**Differential expression of annexin V during spermatogenesis in the newt Cynops pyrrhogaster.";
Dev. Genes Evol. 206:64-71(1996),
                                                                                          ö
                                           Length 321;
                                                                                          Indels
36198 MW; 43E2983F86797025 CRC64;
                                         77.9%; Score 1279; DB 1;
ilarity 78.1%; Pred. No. 6.1e-76;
Conservative 38; Mismatches 32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last sequence update)
115-SEP-2003 (Rel. 42, Last annotation update)
Annexin A5 (Annexin V).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          323 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cynops pyrrhogaster (Japanese common newt).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               308 KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SKDTSGDYRKALLLICGGDD 320
```

^

```
Crumpton M.J.;
                                                                                                         Primary
      between the Swiss Institute of Bioinformatics and the EMBL outstation. The European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial
                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration
                                                                                                                                                                                                              entities requires a license agreement (See http://www.lsb-sib.ch/announce/or send an email to license@lsb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 IASRTPEELRAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVE 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181 QDAQALFQAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNL 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241 EQLLLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MACGCGHMAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SAAFKTLFGRDLLDDLKSELTGRFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
          MEMBRANE FUSION AND IS INVOLVED IN EXCEPTOSIS (BY SIMILARITY). DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-AVG-1988 (Rel. 08, Created)
01-APR-1990 (Rel. 14, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Annexin A6 (Annexin VI) (Lipocottin VI) (P68) (P70) (Protein III)
(Chromobindin 20) (67 kDa calelectrin) (Calphobindin-II) (CPB-II).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (Human).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
FUNCTION: CALCIUM/PHOSPHOLIPID-BINDING PROTEIN WHICH PROMOTES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Length 323;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98 158 ANNEXIN 2.
182 242 ANNEXIN 3.
257 317 ANNEXIN 4.
323 AA, 35981 MW, 044831AC28164CE2 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 66.4%; Score 1089.5; DB 66.7%; Pred. No. 1.1e-63; iive 45; Mismatches 59
                                                         calclum and phospholipid.
--- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
--- SIMILARITY: Contains 4 annexin repeats.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Annexin; Calcium/phospholipid-binding; Repeat.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   672 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               296 KSLHAMIQSDTSGDYRNALLLLCGEID 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301 TSLYSMIKGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                              Pfam; PF00191; annexin; 4.
PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                             SMART; SM00335; ANX; 4.
PROSITE; PS00223; ANNEXIN; 4.
                                                                                                                                                                                                                                                                                                       EMBL; D64134; BAA11012.1; -. HSSP; P08758; 1AVH.
                                                                                                                                                                                                                                                                                                                                               InterPro; IPR001464; Annexin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
Matches 218; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID-9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ANXA6 OR ANX6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ANX6_HUMAN
P08133;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ANX6_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OSC OSC DE PT DE P
음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
```

```
RECORDENCE TESSUE-Uterus;

RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

RA Altaschul S.F., Zeeberg R.L., Feingold E.A., Grouse L.H., Schaefer C.F., Bhat N.K.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Haish F.,

RA Datchenko L., Marusina K., Parmer A.A., Rubin G.M., Hong L.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Caravant T.L., Scheetz T.E.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Carninci P., Prange C.,

RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gabbs R.A.,

RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

RA Whitting M.M., Touchman J.W., Scheurts R.M.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,

Ra Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,

RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;

RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;

RA Ham and mouse CDNA sequences.";

R. Human and mouse CDNA sequences.";

R. Human and mouse CDNA sequences.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Suedhof T.C., Slaughter C.A., Leznicki I., Barjon P., Reynolds G.A.; "Human 67-kDa calelectrin contains a duplication of four repeats
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -i- PTM: PHOSPHORYLATED IN RESPONSE TO GROWTH FACTOR STIMULATION.
-i- MISCELLANEOUS: SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY.
-i- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
-i- SIMILARITY: CONTAINS 8 ANNEXIN FEPE

    -!- DOMAIN: A pair of annexin repeats may form one binding site for
calcium and phospholipid.

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   J. Mol. Biol. 260:638-643(1996).
-!- FUNCTION: MAY ASSOCIATE WITH CD21. MAY REGULATE THE RELEASE OF CA(2+) FROM INTRACELLULAR STORES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Iwasaki A., Suda M., Watanabe M., Nakao H., Hattori Y., Nagoya T.,
Saino Y., Shidara Y., Maki M.;
                                                                                                                          Crompton M.R., Owens R.J., Totty N.F., Moss S.E., Waterfield M.D.,
                                                                                                                                                                                                             structure of the human, membrane-associated Ca2+-binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE=96326697; PubMed=8709144;
Benz J., Bergner A., Hofmann A., Demange P., Goettig P., Liemann
Huber R., Voges D.;
"The structure of recombinant human annexin VI in crystals and
membrane-bound.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Yoshizaki H., Mizoguchi T., Arai K., Shiratsuchi M., Shidara Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Structure and expression of cDNA for calphobindin II, a human placental coagulation inhibitor."; J. Biochem. 106:43-49(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Structure and properties of calphobindin II, an anticoagulant protein from human placenta."; J. Biochem. 107:43-50(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                         protein p68 a novel member of a protein family.";
EMBO J. 7:21-27(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      found in 35-kDa lipocortins.";
Proc. Natl. Acad. Sci. U.S.A. 85:664-668(1988).
                                                                                                                                                                                                                                                                                                                                        [2]
SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
MEDLINE-88124902; PubMed-2963335;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       X-RAY CRYSTALLOGRAPHY (3.2 ANGSTROMS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
MEDLINE-89380132; PubMed-2528541;
[1]
SEQUENCE FROM N.A.
MEDLINE-88196081; Pubmed-3258820;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE.
MEDLINE=90236978; Pubmed=2139657;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -! - INDUCTION: BY EBV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
```

```
REPEAT
REPEAT .
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRINTS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ProDom;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REPEAT
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RPEAT
       SO THE TEST TO SERVICE OF SERVICE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
              between the Swiss institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
 SWISS-PROT entry is copyright. It is produced through a collaboration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       73 LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEITASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                          PROSITE; PS00223; ANNEXIN; 8.
Annexin; Calcium/phospholipid-binding; Repeat; Acetylation;
Phosphorylation; 3D-structure.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Score 932; DB 1; Length 672;
; Pred. No. 4e-53;
52; Mismatches 80; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2829237029BD1DCB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                          ANNEXIN 1.

ANNEXIN 2.

ANNEXIN 3.

ANNEXIN 6.

ANNEXIN 6.

ANNEXIN 7.

ANNEXIN 9.

ACETYLATION.

IE -> MK [IN REF. 2).

E -> D [IN REF. 1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ANX6_MOUSE STANDARD;
P14824;
01-APR-1990 (Rel. 14, Created)
                                                                                                                                                                                                                                                                        InterPro; IPR001464; Annexin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    75742 MW;
                                                                                                                                 EMBL; D00510; BAA00400.1; --
EMBL; Y00097; CAA68286.1; --
EMBL; J03578; AAA35656.1; --
EMBL; BC017046; AAH17046.1; --
                                                                                                                                                                                                                                                                                                        PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    56.8%;
58.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |:||| || || || || || GEYKKTLLKLSGGDD 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    183; Conservative
                                                                                                                                                                                                                                                                                        Pfam: PF00191; annexin;
                                                                                                                                                                                                      PIR; JU0032; AQHU68.
PDB; 1M91; 07-AUG-02.
Genew; HGNC:544; ANXA6.
                                                                                                                                                                                                                                                                                                                                                                                                                                           160
244
319
431
503
592
667
                                                                                                                                                                                                                                                                                                                                           SMART; SM00335; ANX; 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1
225
554
618
672 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOD_RES
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10
                                                                                                                                                                                                                                                                                                                                                                                                          INIT_MET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                          REPEAT
REPEAT
REPEAT
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                             REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 8
ANX6_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   윤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@ib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ::||| |||||||:||| ||:| ||:| ||: ||:|| ||: ||: ||: ||: ||: ||: |:: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: ||: 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            133 KQVY EEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10 RGSVHDFPEFDANQDAEALYTAMKGFGSDKESILELITSRSNKQRQEICQSYKSLYGKDL 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGPQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Moss S.E., Crompton M.E., Crumpton M.J.;

Molecular clonding of murine p68, a Ca2+-binding protein of the lipocortin family.;

lipocortin family.;

-1-5 Blochem. 177:21-27(1988).

-1-FUNCTION: MAY ASSOCIATE WITH CD21. MAY REGULATE THE RELEASE OF CA(2+) FROM INTRACELLULAR STORES.

-1-DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.

-1-DOMAIN: SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY: SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.

-1-SIMILARITY: Contains 8 annexin repeats.
                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Euthazoa; Rodentia; Sciurognathi; Muridae; Murinae; Mus NCBI_TaxID=10090;
01-APR-1990 (Rel. 14, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Annexin A6 (Annexin VI) (Lipocortin VI) (P68) (P70) (Protein III)
(Chromobindin 20) (67 kDa calelectrin) (Calphobindin-II) (CPB-II)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1; Length 672;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2D85C11DD235FC76 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred No. 4e-53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     56.8%; Score 932;
59.0%; Pred. No. 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
ANNEXIN 6.
ANNEXIN 6.
ANNEXIN 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE-89030687; PubMed-2972541;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HSSP; P79134; IAVC.
MGD; MGI:88255; Anxa6.
InterPro; IPR001464; Annexin.
Pfam; PF00191; annexin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             75755 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; X13460; CAA31808.1; ~.
PIR; S01786; S01786.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PR00196; ANNEXIN. PD000143; Annexin; 8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity 59.0
16; Conservative
                                                                                                                                                                                                                                                 Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         443
532
607
672 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28
100
184
259
371
                                                                                                                                                                                           ANXA6 OR ANX6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN-BALB/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Simi
Matches 186;
```

```
NEW TENERS OF THE SECOND OF TH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A SCHOLANGE FORM NA.

REAUSINEE-EYE, AND WIGHER.

REAUSINEE-EYE, RELIGOID E.A., GTOUSE L.H., DERGE J.G.,

RA STRAUSBERGY R.L., FeliHOOLD E.A., GTOUSE L.H., DERGE J.G.,

RA Klausner R.D., Collins F.S., Wagner L., Shemmen C.M., Schuler G.D.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Brownstein M.J., Usdin T.B., Toshlyuki S., Carninci P., Prange C.,

RA Rosak S.A., McEwan B., Deters G.J., Abramson R.D., Mullahy S.J.,

RA BOSAK S.A., McEwan F.J., McKernan K.J., Malck J.A., Gunaratne P.H.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.M.,

RA Nillalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

RA Pahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

RA Mhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;

R. Ceneration and initial analysis of more than 15,000 full-length
                                              190 KWGTDEAQFIYILGNRSKQHLRLVFDEYLKTTGKPIEASIRGELSGDFEKLMLAVVKCIR 249
                                                                                                                                                                                                                                                                                                                  ANX4_HUMAN STANDARD; PRI; 318 AA.
P09525; 196673; 098671.
01-MRA-1989 (Rel. 10, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
15-SEP-2003 (Rel. 42, Last annottation update)
Annexin A4 (Annexin IV) (Lipocortia IV) (Endonexin I) (Chromobindin 4)
(PPOTEIN II) (P32.5) (Placental anticoaquiant protein II) (PAP-II)
(PPA *A) (35-beta calcimedin) (Carbohydrate-binding protein P33/P41)
ANXA4 OR ANX4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mamumalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Grundmann U., Amann E., Abel K.-J., Kuepper H.A.;
"Isolation and expression of cDNA coding for a new member of the phospholipase A2 inhibitor family.";
Behring Inst. Mitt. 82:59-67(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Characterization of human p33/41 (annexin IV), a Ca2+ dependent carbobydrate-binding protein with monoclonal anti-annexin IV antibodies, ASI1 and ASI7.";
Biol. Pharm. Bull. 20:224-229(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE-97239215; PubMed-9084877;
Satoh A., Takayama E., Kojima K., Ogawa H., Katsura Y., Kina T.,
Matsumoto I.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE-92155721; Pubmed-1346776;
Talt J.F., Smith C., Frankenberry D.A., Miao C.H., Adler D.A.,
Disteche C.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Chromosomal mapping of the human annexin IV (ANX4) gene."; Genomics 12:313-318(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE-88309022; PubMed-2970257;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  human and mouse cDNA sequences.";
                                                                                                                                                                          1:111111 | 1 | 1 | 310 GEYKKALLKLCGGDD 324
                                                                                                                                                GDYKKALLLISGEDD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=9606;
                                                                                                                                                313
                                                                                                                                                                                                                                                                         RESULT 9
                                                                                                                                                                                                                                                                                                                                               a
                                              ò
                                                                                                                                                ò
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isp-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14 GTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                    "Sedimentation equilibrium analysis of five lipocortin-related phospholipase A2 inhibitors from human placenta. Evidence against a mechanistically relevant association between enzyme and inhibitor."; J. Biol. Chem. 263:18657-18663(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -!- MISCELLANEOUS: SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY. -!- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY. -!- SIMILARITY: Contains 4 annexin repeats.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human placental annexin IV.";
J. MOL. Biol. 216:219-221(1990).
-!- FUNCTION: CALCIUM/PHOSPHOLIPID-BINDING PROTEIN WHICH PROMOTES
MEMBRANE FUSION AND IS INVOLVED IN EXOCYTOSIS (BY SIMILARITY).
-!- DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.
                                                                                                                  Ahn N.G., Teller D.C., Bienkowski M.J., McMullen B.A., Lipkin E.W.,
de Haen C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  X-RAY CRYSTALLOGRAPHY.

MEDLINE-24073383; PubMed-2254922;
Freemont P.S., Driessen H.P.C., Verbi W., Crumpton M.J.;

"Crystallization and preliminary X-ray crystallographic studies of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                     comparative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 318;
                                                                                                                                                                                                                                                                                                                                                                                    Tait J.F., Sakata M., McMullen B.A., Miao C.H., Funakoshi
Hendrickson L.E., Fujikawa K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           characterization four members of the lipocortin family.";
Biochemistry 27:6268-6276(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            78; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -> Q (IN REF. 1).
16B19E01500350F7 CRC64;
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MIM, 106491; ...
Interpro; IPR00464; Annexin.
Pfam; PF00191; annexin, 4.
PRINTS; PR00196; ANNEXIN.
Propom; PD000143; Annexin, 4.
PROSITE; PS00223; ANNEXIN, 4.
Annexin; Calcium/phospholipid-binding; Repeat.
INIT MET

22 82 ANNEXIN 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Placental anticoagulant proteins: isolation and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No. 6.2e-53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 923; DB 1;
                                                                                                                                                                                                                                                                                                                               SEQUENCE OF 1-14; 27-71; 99-143 AND 280-318.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            53; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
                           |53|
SEQUENCE OF 26-55; 98-123 AND 279-307.
MEDLINE-8906652; PUBMEd-2974032; PROBLINE-8906652; PROBLEMEDLINE-REMEMBER M.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; M19383; AAC41689.1; ALT_INIT.
EMBL; M82809; AAA51740.1; -.
EMBL; D78152; BAA11227.1; ALT_INIT.
EMBL; BC000182; AAH00182.1; ALT_INIT.
EMBL; BC011659; AAH11659.1; ALT_INIT.
                                                                                                                                                                                                                                                                                                                                                              MEDLINE-89118212; PubMed-2975506;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      35751 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              56.2%;
58.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HSSP; P13214; 1ANN.
SWISS-2DPAGE; P09525; HUMAN.
PMMA-2DPAGE; P09525; -.
Genew; HGNC:542; ANXA4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 183; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      318 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sest Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REPEAT
```

ö

```
PIR; A27107; LUPG4
                                                                                                                                                                                                                                                                                                                                        REPEAT
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                   REPEAT
                                                                                                                                                                                                                                                                                                                   REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ANX6
  DOR WEET THE SOCIAL SOC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMEL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@lsb-sib.ch).
                                                                                                                                           193
                                                     ANX4_PIG STANDARD; PRT; 318 AA.
P08132; Q29306;
01-AUG-1988 (Rel. 08, Created)
01-AUG-1988 (Rel. 08, Last sequence update)
20-FEB-2003 (Rel. 41, Last annotation update)
Annexin A4 (Annexin IY) (Lipocortin IY) (Endonexin I) (Chromobindin 4)
(Protein II) (P32.5) (Placental anticoagulant protein I) (PAP-II)
ANX4 OR ANX4.
                                                                                                                                                                                                                                                                                      |||||| ||:|: :|: :|| |||:| || ||:| ||||:| ||||:| ||||:|| |||:|| ||-||:|| ||-||:|| ||-||:|| ||-||:|| #GTDEVXFLIVECMRN
                       DDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIK
                                                                                                                                        OVY EEEYGSSLEDDVVGDTSGYYORMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGELK
                                                                                                                                                                                                                                                     194 WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS
                                                                                                                                                                                                                                                                                                                                                                   IPAYLAETLYYAMKGAGTDDHTLIRVWVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE-Intestinal epithelium;
MEDLINE-87275850; PubMed-2956093;
Weber K., Johnsson N., Plessmann U., Van P.N., Soling H.-D., Ampe C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -1- SUBUNIT: Monomer.
-1- DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.
-1- MISCELLANEOUS: SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY:
-1- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
-1- SIMILARITY: Contains 4 annexin repeats.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The amino acid sequence of protein II and its phosphorylation site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE-Small Intestine;
MEDLINE=96327607; Pubmed=8672129;
Winteroe A.K., Fredholm M., Davies W.;
"Evaluation and characterization of a porcine small intestine cDNA library: analysis of 839 clones.";
"Evaluation and characterization of a porcine small intestine cDNA library: analysis of 839 clones.";
"Evaluation and characterization of a porcine small intestine cDNA library: analysis of 839 clones.";
"EVALUATION: CALCIOW/PHOSPHOIPID-BINDING PROTEIN WHICH PROMOTES MEMBRANE FUSION AND IS INVOLVED IN EXOCYTOSIS (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
NCBI_TaxID=9823;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for protein kinase C; the domain structure Ca2+-modulated lipid binding proteins "; EMBO J. 6:1599-1604(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; F14682; CAA23194.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ||:| ||:| || || || || || || || || DYRKVLLVLCGGDD 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE OF 1-126 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUBUNIT: Monomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Vandekerckhove J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sus scrofa (P1q).
                                                                                                                                                                                          125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         308
                                                                            65
                                                                                                                                                                                                                                                                                                              185
                                                                                                                                                                                                                                                                                                                                                                   254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                          셤
                                                                                                                                        à
                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                           윱
                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                               133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   65 DDLKSELSGNFEQVILGMMTPTVLXDVQELRRAWKGAGTDEGCLIBILASRTPEEIRRIN 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         304
                                                                                                                                                                                                                                                                                                                                                                                             73
                                                                                                                                                                                                                                                                                                                                                                                                                          64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                254 IPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14 GTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQKISAAFKTLFGRDLL
                                                                                                                                                                                                                                                                                                                                                                                                                            GTVKAASGFNAAEDAQTLRKAMKGLGTDEDAIISVLAYRSTAQRQEIRTAYKSTIGRDLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFOAGELK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Métazoa; Chordata; Craniata; Vertebrata; Euteleostoml;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
16-SEP-2003 (Rel. 42, Last annotation update)
42, Last annotation update)
42, Cast annotation (P68) (P70) (Protein III)
43, Canculum-binding protein CATA 65/67).
ANXA6 OR ANX6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eur. J. Biochem. 230:741-751(1995).
                                                                                                      PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium/phospholipid-binding; Repeat; Phosphorylation;
Acetylation. 0 0
                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             oţ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fan H., Josic D., Lim Y.P., Reutter W.; "CDNA cloning and tissue-specific regulation of expression of calcium-binding protein 65/67. Identification as a homologue
                                                                                                                                                                                                                                                                                                                       Length 318;
                                                                                                                                                                                                                                                                                                                    Match '56.1%; Score 921; DB 1; Length 31 Local Similarity 58.6%; Pred. No. 8.3e-53; les 184; Conservative 51; Mismatches 79; Indels
                                                                                                                                                                                                                                                1 1 ACETYLATION (PROBABLE).
6 6 PHOSPHORYLATION (BY PKC).
318 AA; 35697 MW; FA7D9CEZB7C631E8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         672 AA
                                                                                                                                                                            ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN-Sprague-Dawley; TISSUE-Liver; MEDLINE-95331313; Pubmed-7607247;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
HSSP; P13214; IANN.
InterPro; IPR001464; Annexin.
                                                   PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
SMART; SM00335; ANX; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                314 DYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ||:| ||:| || ||
305 DYRKVLLILCGGDD 318
                                  Pfam; PF00191; annex1n; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=10116;
                                                                                                                                                                              22
94
178
253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              annexin VI."
                                                                                                                                                                                                                                                  MOD_RES
MOD_RES
SEQUENCE
                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
Matches 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ANX6_RAT
P48037;
                                                                                                                                                                                                                                                                                                                                                                                                                              ហ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          194
```

```
305
                                                                                                                                                                                                                                                                                                                                                                           INIT_MET
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            314
                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local
                                                                                                                                                                                                                                                                                                                                               SMART;
                                                                                                                                                                                                                                                                                                                                                                                               REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                        REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                  REPEAT
   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                   This SWISS-PROT entry is copyright. It is produced through a collaboration
                                                                            between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics and the EMBL outstation. The European Bioinformatics Institute. There are no restrictions on its was by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@lsb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  73 LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                        193 KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  253 SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                   10 RGSVHDFADFDANQDAEALYTAMKGFGSDKESILELITSRSNKQRQEICQSYKSLYGKDL 69
                                                                                                                                                                                                                                                                                                                                                                                                      13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
       -1- DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.
-1- MISCELLAMBOUS: SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY.
-1- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
-1- SIMILARITY: Contains 8 annexin repeats.
                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                 Length 672;
                                                                                                                                                                                                                                                                                                                                                                                    82; Indels
                                                                                                                                                                                                                                                 BY SIMILARITY.
ANNEXIN 1.
ANNEXIN 3.
ANNEXIN 4.
ANNEXIN 4.
ANNEXIN 6.
ANNEXIN 7.
ANNEXIN 7.
ANNEXIN 8.
                                                                                                                                                                                                                                                                                                                                                                Score 921; DB 1;
Pred. No. 2.1e-52;
                                                                                                                                                                                                          ProDom; PD000143; Annexin; 8.
SMART; SM00343; ANX; B.;
AnNEXID; PS00223; ANNEXIN; 7.
Annexin; Calcium/phospholipid-binding; Repeat.
INIT_MET 28 88 ANNEXIN 1.
REPEAT 100 160 ANNEXIN 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                   48; Mismatches
  CA(2+) FROM INTRACELLULAR STORES
                                                                                                                                                                                                                                                                                                                                                                         Pred.
                                                                                                                                                                                                                                                                                                                                             75622 MW;
                                                                                                                                             EMBL; X86086; CAA60040.1; -. PIR; S65683; S52844. HSSP; P79134; IAVC. InterPro; IPR001464; Annexin.
                                                                                                                                                                                     Pfam; PF00191; annexin; 8.
PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 8.
                                                                                                                                                                                                                                                                                                                                                                56.1%;
58.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 58.7 Matches 185; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Annexin A4 (Annexin IV).
                                                                                                                                                                                                                                                                      160
244
319
431
503
503
                                                                                                                                                                                                                                                                                                             443
532
607
672 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ANX4_MOUSE
P97429;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           313
                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                REPEAT
REPEAT
                                                                                                                                                                                                                                                                                                     REPEAT
                                                                                                                                                                                                                                                                                                               REPEAT
                                                                                                                                                                                                                                                                                                                         REPEAT
                                                                                                                                                                                                                                                                                                                                   REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ANX4_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
```

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       74 DDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIK 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      134 QVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGELK 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14 GTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            194 WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        254 IPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                 Sable C.L., Shannon J., Riches D.W.H.;
Submitted (JAN-1997) to the BMBL/Genbank/DDBJ databases.

-1- FUNCTION: CALCIUM/PHOSPHOLIPID-BINDING PROTEIN WHICH PRONOTES
MEMBRANE FUSION AND IS INVOLVED IN EXOCYTOSIS (BY SIMILARITY).

-1- DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.

-1- MISCELLANEOUS: SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY (BY SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.

-1- SIMILARITY: Contains 4 annexin repeats.
Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 318;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             76; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              53FAC7AD8006BC0D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            55.8%; Score 916; DB 1; 57.3%; Pred. No. 1.8e-52;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           58; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ANNEXIN 3.
ANNEXIN 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ANNEXIN 1.
ANNEXIN 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ANNEXIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82 AN
154 AN
238 AN
313 AN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MGD; MGI:88030; Anxa4.
InterPro; IPR001464; Annexin.
Pfam; PF00191; annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ||:| ||:| || || DYRKVLLILCGGDD 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; U72941; AAB40697.1;
HSSP; P13214; 1ANN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 180; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SM00335; ANX; 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22
94 1
178 2
253 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                   FROM N.A.
                                                                       NCBI_TaxID-10090;
                                                                                                                   SEQUENCE FROM I
```

```
Annexin; Calcium/phospholipid-binding; Repeat; 3D-structure,
 ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-JAN-1990 (Rel. 13, Created)
01-JAN-1990 (Rel. 13, Last sequence update)
01-JAN-1990 (Rel. 13, Last sequence update)
15-SEP-2003 (Rel. 42, Last sequence update)
Annexin A4 (Annexin IV) (Lipocortin IV) (Endonexin I) (Chromobindin 4)
(Protein II) (P32.5) (Placental anticoagulant protein II) (PAP-II)
(PP3-X) (35-beta calcimedin) (Carbohydrate-binding protein P33/P41)
                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
MEDLINE-96205957; PubMed=8631806;
KCojima K., Yamamoto K., Irimura T., Osawa T., Ogawa H., Matsumoto I.;
"Characterization of carbonydrate-binding protein p33/41: relation
with annexin IV, molecular basis of the doublet forms (p33 and p41),
and modulation of the carbohydrate binding activity by
phospholipids.";
J. Blol. Chem. 271:7679-7685(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bos taurus (Bovine).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
                                                                                                                                                                                                                               TISSUE-Liver;
MEDILINE-99050088; PubMed-2847715;
Hamman H.C., Gaffey L.C., Lynch K.R., Creutz C.E.;
"Cloning and characterization of a cDNA encoding bovine endonexin
                                                                                                                                                                                                                                                                               (chromobindin 4).";
Biochem. Biophys. Res. Commun. 156:660-667(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                       Sutton R.B., Sprang S.R., Submitted (SEP-1995) to the PDB data bank.
                                                                                                                                                                                                                                                                                                                                                                                                                            (-RAY CRYSTALLOGRAPHY (2.3 ANGSTROMS).
                      PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
SMART; SM00335; ANX; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro; IPR001464; Annexin.
Pfam; PF00191; annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE, PS00223; ANNEXIN; 4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; M22248; AAA30507.1; -. EMBL; X13627; CAA31954.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; D78178; BAA11243.1; -. PIR; A31578; LUBG4.
PDB; IANN; 29-JAN-96.
PDB; IAOW; 14-JAN-98.
PDB; IAOW; 14-JAN-98.
                     STANDARD;
                                                                                                                                                                             Bovidae; Bovinae; Bos.
NCBI_TaxID-9913;
                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                ANXA4 OR ANX4.
                     ANX4_BOVIN
P13214;
```

```
DDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIK 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           194 WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            254 IPAYLAETLYYAMKGAGTDDHTLIRVMYSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5 GTVKAASGFNAAEDAQTLRKAMKGLGTDEDAIINVLAYRSTAQRQEIRTAYKTTIGRDLM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       134 QVYBEBYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDBAQVBQDAQALFQAGELK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
01-OCT-1996 (Rel. 41, Last sequence update)
Annexin A4 (Annexin IV) (Lipocortin IV) (36 kDa zymogen granule membrane associated protein) (ZAP36).
ANXA4 OR ANX4.
Canis familiaris (Dog).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 55.7%; Score 914; DB 1; Length 318; Best Local Similarity 58.0%; Pred. No. 2.4e-52; Matches 182; Conservative 51; Mismatches 81; Indel8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        35757 MW; 86BDBDF349D774FD CRC64;
                                                                                                                                                          88
                                                                                                                                                                                             REF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    318 AA
                                NNEXIN 1.
NNEXIN 2.
NNEXIN 3.
NNEXIN 4.
                                ANNEXIN ANNEXIN ANNEXIN ANNEXIN ANNEXIN ANNEXIN A C - > V (1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ||:| ||:| || || || DYRKVLLILCGGDD 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        294
304
318 AA;
                                                                                                                                                                                                                                                                                                              ANX4_CANFA
P50994;
INIT_MET
REPEAT
REPEAT
REPEAT
CONFLICT
CONFLICT
HELIX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HELIX
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HELIX
HELIX
TURN
                                                                                                                                                                                                                                                 HELIX
TURN
HELIX
                                                                                                                                                                                                                                                                                                                                           HELIX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HELIX
HELIX
HELIX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HELIX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HELIX
                                                                                                                                                                                                                                                                                                                                                                                                        HELIX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ANX4_CANFA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   URN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ID DI DI ON OS CON OS C
```

ö

```
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation-the European Bioinformatics Institute. There are no restrictions on its most by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       70 RDLLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEEL 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          130 RAIKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQA 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               190 GELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVK
                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                               MEDLINE-94092130; PubMed-8267590;
Cao X., Genge B.R., Wu L.N., Buzzi W.R., Showman R.M., Wuthler R.E.;
Cao X., Genge B.R., Wu L.N., Buzzi W.R., Showman R.M., Wuthler R.E.;
Cao X., Genge B.R., Wu L.N., Buzzi W.R., Showman R.M., Wuthler Rom
Chicken growth plate cartilage matrix vesicles.";
Blochem. Blophys. Res. Commun. 197:556-561(1993).
I-FUNCTION: MAY ASSOCIATE WITH CD21. MAY REGULATE THE RELEASE OF
CA(2+) FROM INTRACELLULAR STORES (BY SIMILARITY).
I-DOMAIN: A pair of annexin repeats may form one binding site for calcium and phospholipid.
I-SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
I-SIMILARITY: Contains 8 annexin repeats.
                        01-0CT-1996 (Rel. 34, Created)
01-0CT-1996 (Rel. 34, Last sequence update)
15-SEP-2003 (Rel. 42, Last annotation update)
Annexin A6 (Annexin VI) (Lipocortin VI) (P68) (P70) (Protein III)
(Chromobindin 20) (67 kDa calelectrin) (Calphobindin-II) (CPB-II)
ANXA6 OR ANX6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Length 671;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DOE02F4311A93D98 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    83;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       54.6%; Score 896.5; DB 1
57.7%; Pred. No. 7.9e-51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    51; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ANNEXIN 1.
ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
ANNEXIN 5.
ANNEXIN 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE; PS00223; ANNEXIN; 5.
Annexin; Calcium/phospholipid-binding; REPEAT 27 87 ANNEXIN 1.
REPEAT 183 243 ANNEXIN 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ANNEXIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PIR; JC2029; JC2029.
HSSP: P79134; JANC.
Interpro; IPR001464; Annexin.
Pfam; PP00191; annexin; 8.
Prints; PR00166; ANNEXIN,
ProDom; PD000143; Annexin; 8.
SMART; SM00335; ANX; 8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 75218 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; S67466; AAB29337.2; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches 184; Conservative
                                                                                                                                                       Gallus gallus (Chicken)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    183
258
370
442
531
607
671 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                          NCBI_TaxID=9031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REPEAT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REPEAT
REPEAT
REPEAT
REPEAT
        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>දි</u> අ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                            This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see http://www.isb-sib.ch/announce/or send an email to license@ib-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              74 DDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIK 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 134 QVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGELK 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          254 IPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14 GTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         calcium and phospholipid.
MISCELLANEOUS: SEEMS TO BIND ONE CALCIUM ION WITH HIGH AFFINITY
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 318;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              42EF5B89179B4863 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       54.9%; Score 901; DB 1; 57.0%; Pred. No. 1.6e-51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SMART; SM00335; ANX; 4.
PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calclum/phospholipid-binding; Repeat.
                                                                                                                                                                                                                                                                                                  SIMILARITY: BELONGS TO THE ANNEXIN FAMILY. SIMILARITY: Contains 4 annexin repeats.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     671 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No. 1.5e
54; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BY SIMILARITY
ANNEXIN 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ANNEXIN 2.
ANNEXIN 3.
ANNEXIN 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                       SEQUENCE FROM N.A.
STRAIN-Mongrel; TISSUE-Pancreas;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro; IPR001464; Annexin.
Pfam; PF00191; annexin; 4.
PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            35681 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; D38223; BAA07398.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ||:| ||:| | ||
DYRKVLLILCGGDD 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 314 DYKKALLLISGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 57.0% es 179; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              154
238
313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  178 2
253 3
318 AA;
                                                                                                                                                                                                                                                                                  (BY SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HSSP; P13214; 1ANN.
                                          NCBI_TaxID=9615;
                                                                                                                                 Fukuoka S.-I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ANX6_CHICK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INIT_MET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REPEAT
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ANX6_CHICK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  £
  SOCCES STREET ST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ç
```

69 65

Gaps

ï

δ q

Qy Dp

Search completed: August 22, 2003, 21:33:39 Job time : 9.66667 secs

```
Q90159 bombyx mori
Q9055 drosophila
Q8wp99 bombyx mori
Q8wp90 bombyx mori
Q27512 caenorhabdi
Q90160 bombyx mori
Q90160 bombyx mori
Q90217 mus musculu
Q95v57 artemia san
                                                                                                                                                                                                                                                                                                                                                                                            Q92128 venopus lac
Q27864 caenorhabdi
Q8ccy9 mus musculu
Q8bs12 mus musculu
Q27473 caenorhabdi
Q9xy89 schistosoma
                                   Q9n161 bombyx mori
Q81gj8 drosophila
Q921d0 mus musculu
   Q8vin2 rattus norv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             O8hzm6 equus cabal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Strausberg R.;
Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.
C. --- DAMIN: A PAIR OF ANNEXIN REPEATS MAY FORM ONE BINDING SITE FOR CALCIUM AND PHOSPHOLDIDI GBY SIMILARITY.
C. --- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
C. --- SIMILARITY: CONTAINS 4 ANNEXIN REPEATS.
R. FMBL; BC018671; AAH18671.1; -.
R. InterPro: IPR001464; Annexin.
PRINTS: PR00191; annexin.
PRINTS: PR00195; ANNEXIN.
PRODOM: PD000143; Annexin.
ProDom: PD000143; Annexin.
PRODOM: PD000143; ANN.
R. SWART: SM00335; ANX.
Annexin: Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MAQVLRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        320 AA; 35924 MW; 45FAC411DDBA4D1A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Created)
Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 1585; DB 4;
Pred. No. 1.2e-103;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          320 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ALIGNMENTS
                                                                                                                                                                                                                                                                                                                        093446
090XG4
098SH7
08HZM6
                                                                                                                                                                                                                                                                                                                                                                                              092128
027864
08CCV9
08BSL2
027473
Q8VIN2
Q8BP75
Q9NL61
                                               Q81GJ8
Q921D0
Q9NL59
Q9NG55
                                                                                                                                                                                                                                        Q95ZI7
                                                                                                                                                                                                                                                                          Q99JG3
Q8MJB5
                                                                                                                     Q8WPG9
Q8WPH0
                                                                                                                                                   027512
09GNG6
09NL60
0969D3
08TBV2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                              09VXG3
                                                                                                                                                                                                                                                                                                                                                            13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 96.5%;
Best Local Similarity 99.4%;
Matches 318; Conservative
                                                                                                                                                                                                                                        01-MAR-2002 (TrEMBLrel. 20, 01-MAR-2002 (TrEMBLrel. 20, 01-MAR-2003 (TrEMBLrel. 23, Annexin A5.
                                                                                                                                                                                                                                                                                                                                                                                               13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
 463
3324
3324
3324
3323
3324
3323
3324
3323
3324
3323
3324
3324
3324
3325
3326
3327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 [1]
SEQUENCE FROM N.A.
 444444444444444444444444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID-9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE-Skin;
770
770
752
743.5
720
720
720
715
701
701
701
701
701
694.5
686.5
680.5
680.5
680.5
680.5
680.5
680.5
680.5
680.5
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
680.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q8WV69;
Q8WV69;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1
Q8WV69
   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9991al mus musculu 070371 rattus norv 091445 oryzias lat 086eex0 mus musculu 0991x6 mus musculu 0981x4 oryzias lat 093447 oryzias lat 09347 oryzias lat 090x16 xenopus lae 09211 mus musculu 0882n9 mus musculu 0882n9 mus musculu 0862n9 mus musculu 0861x9 mus musculu 095220 orygetolagus 097222 mus musculu 092222 mus musculu 092222 mus musculu 092222 mus musculu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q8wv69 homo sapien
                                                                                                            August 22, 2003, 21:29:22 ; Search time 31.6667 Seconds (without allgnments) 2664.733 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
                                                                                                                                                                              US-09-970-969-6
1642
1 MACGCGHMAQVLRGTVTDFP......KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Description
               GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                        830525 segs, 258052604 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                            Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                               - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   093445
08CEX0
099JX6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q8BSS4
Q93444
Q93447
Q90X16
Q921F1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q8K2N9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07037
                                                                                                                                                                                                                                                                       Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sp_fungi:*
sp_human:*
sp_invertebrate:*
sp_mammal:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sp_vertebrate:*
sp_unclassified:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sp_bacteriap:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sp_organelle:*
sp_phage:*
                                                                                                                                                                                                                                                                                                                                                                            length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sp_archea:*
sp_bacteria:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sp_archeap:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sp_rodent:*
sp_virus:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sp_rvirus:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sp_plant: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SPTREMBL_23:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sp_mhc: *
                                                                                                                                                                                                                                                       BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 996.5
889.9
884.7
884.7
853.5
853.7
851.7
851.7
86.7
86.7
87.1
                                                                                                                                                                                                                                                                                                                                                                            sed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     849
847
840.5
836.5
822.5
799
                                                                                                                                                                                                     Perfect score:
                                                                                                                                                                                                                                                       Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score
                                                                                                                                                                                                                                                                                                                                                                          Minimum DB
Maximum DB
                                                                               OM protein
                                                                                                                                                                                                                       Sequence:
                                                                                                                                                                                                                                                                                                        Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Database
                                                                                                                 Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ş.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   65432
65432
65432
65432
65432
```

ö

a

```
302 AA
                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-Lung;
MEDLINE-99262163; PubMed-10329451;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12;
                                                                                                                                    313 GDYKKALLLL-SGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 InterPro; IPR001464; Annexin.
                                                                                                                                                                                                                                                                    07,
23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE; PS00223; ANNEXIN;
                                                                                                                                                                                                                                                                01-AUG-1998 (TrEMBLrel. 0
01-AUG-1998 (TrEMBLrel. 0
01-AMC-2003 (TrEMBLrel. 2
Lipocortin V (Fragment).
Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SMART; SM00335; ANX;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Sim
Matches 276;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Annexin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Repeat.
                                                                                                                                                                                                                                    å
                                                                                셤
                                                                                                                 ò
                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
             ELRAIKOVYEEEYGSSLEDDVVGDTSGYYORMLVVLLQANRDPDAGIDEAQVEQDAQALF 187
                                                                                                                                                 QAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAV 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLISRSNAQRQEISAAFKTLFGRDL 72
                                                                                                                                                                                                                 248 VKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 11; Length 319;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          89.9%; Score 1475.5; DB 11; Lengt larity 93.4%; Pred. No. 5.8e-96; Conservative 9; Mismatches 11; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             52E2C7CCEA386917 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Created)
Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                  KGDTSGDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                   KGDTSGDYKKALLLCGEDD 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             319 AA; 35738 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                 01-JUN-2001 (TrEMBLrel. 17, 01-JUN-2001 (TrEMBLrel. 17, 01-MAR-2003 (TrEMBLrel. 23,
                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
ses 295; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Annexin A5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                               188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  193
                                                                                                                                                                                                                                                                                                                                                                                                  099LA1
099LA1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                 RESULATION OF COMMINION OF COMM
                                                                                                       8
                                                                                                                                                                                                                                          셤
                                                                                                                                               ö
                                                                                                                                                                              q
                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                         g
                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
```

```
ö
72 LLDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRA 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      132 IKQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGE 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 123 IKQAYEEEYGSNLEDDVVGDTSGYYQRNLVVLLQANRDPDTAIDDAQVELDAQALFQAGE 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12 LRGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRD 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LKWGTDEEKFITILGTRSVSHLRRVFDKYMTISGFQIEETIDRETSGNLENLLLAVVKSI
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Wen Y., Edelman J.L., Kang T., Sachs G.;
Lipocortin V may function as a signaling protein for vascular endothelial growth factor receptor 2/Flk-1.";
Biochem. Blophys. Res. Commun. 258:713-721(1999).
-!- DOWANI. A PAIR OF ANNEXIN REPEATS MAY FORM ONE BINDING SITE I CALCIUM AND PROSPHOLIPID (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
-: SIMILARITY: CONTAINS 4 ANNEXIN REPEATS.
EMBL; AF051895; AAC06290.1; --
HSSP; P14668; 1A8B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Calctum; Calctum-binding; Calctum/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          84.7%; Score 1390; DB 11; Length 302; 92.0%; Pred. No. 5.6e-90; tive 12; Mismatches 12; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         302 302
302 AA; 33965 MW; AB9FB40934A3D007 CRC64;
                                                                                                                                                                                                                                                                                                                           Created)
Last sequence update)
Last annotation update)
```

ö

Gaps

ö

72

RESULT 093445

```
73 LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN-C57BL/6J;
MEDLINE-223546B3; PubMed-12466B31;
The FANTOM Consortium.
The FANTOM Consortium.
The RIKEN Genome Exploration Research Group Phase I & II Team;
"Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length convis.";
Nature 420:563-573(2002).
EMBL; AK010342; BAC25291.1;
SEQUENCE 476 AA; 53669 MW; 9390C5B5E6653D24 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Straubberg R.;
Submitted (Apr-201) to the EMBL/GenBank/DDBJ databases.
Submitted (Apr-201) to the EMBL/GenBank/DDBJ databases.
-!- DOMAIN: A PAIR OF ANNEXIN REPEATS MAY FORM ONE BINDING SITE FOR CALCIUM AND PHOSPHOLIPID (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
-!- SIMILARITY: COUTAINS 8 ANNEXIN REPEATS.
-!- SIMILARITY: COUTAINS 8 ANNEXIN REPEATS.
--- SIMILARITY: CANTAINS 8 ANNEXIN REPEATS.
--- SIMILARITY: AND THE STRAIN STRAINS STRAINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                         Craniata, Vertebrata, Euteleostomi,
Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 476;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Last sequence update)
Last annotation update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  56.8%; Score 932; DB 11, 59.0%; Pred. No. 1.8e-57, tive 48; Mismatches 8:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                           Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
NCBI_TaxID-10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |:|||||| | | | ||
311 GEYKKALLKLCGGDD 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 313 GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17,
17,
23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 59.0°
Matches 186; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q99JX6;
01-JUN-2001 (TrEMBLrel.
01-JUN-2001 (TrEMBLrel.
01-MAR-2003 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similar to annexin A6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID-10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9XL660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ANXA6
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       73 LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               64 INDLKSELGGKFETLIVALMTPPTAYDVVSLRNAIKGAGTDEKVLVEILASRIPQQVKDI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         133 KOVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE-99025617; PubMed-9809745;
Osterloh D., Wittbrodt J., Gerke V.;
Characterization and developmentally regulated expression of four annexins in the Killifish medaka.";
DNA Cell Biol. 17:835-847(1998).
-!- DOMAIN: A PAIR OF ANNEXIN REPEATS MAY FORM ONE BINDING SITE FOR CALCIUM AND PHOSPHOLIPID (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE ANNEXIN REPEATS.
-!- SIMILARITY: CONTAINS 4 ANNEXIN REPEATS.
-!- SIMILARITY: CONTAINS 4 ANNEXIN REPEATS.
--- SIMILARITY: AND SIMILARITY.
--- SIMILARITY: CONTAINS 4 ANNEXIN REPEATS.
                                                                                                                                                                                                                           Oryzias latipes (Medaka fish) (Japanese ricefish).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml;
Extinopterrygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha;
Beloniformes; Airianichthyidae; Oryziinae; Oryzias.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SMART; SM00335; ANX; 4.
PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <del>.</del>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 317;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AFD618681BAFF0FE CRC64;
                                                                                                                                                       Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          63.5%; Score 1042; DB 13;
64.4%; Pred. No. 1.8e-65;
11ve 48; Mismatches 62;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Created)
Last sequence update)
                                                                         317 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                               Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE 317 AA; 34765 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pfam; PF00191; annexin; 4.
PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |||:|||||| || || GDYRKALLLLCGGDD 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GDYKKALLLLSGEDD 327
                                                                                                                 01-NOV-1998 (TrEMBLrel. 08, 01-NOV-1998 (TrEMBLrel. 08, 01-MAR-2003 (TrEMBLrel. 23, Annexin max2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (TrEMBLrel. 23, (TrEMBLrel. 23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best_Local Similarity 64.49
Matches 203; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OBCEX0
OBCEX0;
01-MAR-2003 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                 . 093445;
                                                                      093445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Repeat
```

RESULT 5

요

ö

유

õ g ŏ 셤 õ ద ŝ 셤

ð

08CEX0 1D 08 AC 08 DT 01

```
093444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Repeat
                                                                                                                                                         RESULT
093444
                 8
                                     ð
                                                      8
                                                                        ò
                                                                                         g
                                                                                                            ò
                                                                                                                           a
                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ô
                                                                                                                                                       LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                               73 LDDLKSELTGRFEKLIVALMKPSRLYDA'YELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ŏ
                                                                                                                    SIPAYLAETLYYAMKGAGTODHTLIRVWVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                    KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Team;
annotation
                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
NCBI_TaxID=10090;
                         PROSITE; PS00223; ANNEXIN; 8.
Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                         ö
                                                                        667;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 673;
                                                                                        80; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the RIKEN Genome Exploration Research Group Phase I & II "Analysis of the mouse transcriptome based on functional 60,770 full-length cDNAs.";
Nature 420.565-573(2002).
EMBL: AK030728: BAC27101.1; -.
SEQUENCE 673 AA; 75885 MW; DCC5FC56CBD88809 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81; Indels
                                                                         Length
                                                     667 AA; 75260 MW; 363088A2A55CFF34 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                   Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ); DB 11;
4.1e-57;
                                                                      ; Score 932; DB 11;
; Pred. No. 2.9e-57;
49; Mismatches 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tch
al Similarity 59.0%; Pred. No. 4.1e
186; Conservative 48; Mismatches
                                                                                                                                                                                                                                                                                                                                                          673
                                                                                                                                                                                                                                                                                                                                                                           Created)
                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN-C57BL/6J; TISSUE-BOdy;
MEDLINE-22354683; Pubmed-12466851;
         PD000143; Annexin; 8.
                                                                       56.8%;
                                                                                                                                                                                                                                                                                                      |:|||||| | | ||| GEYRKALLKLCGCDD 325
                                                                                                                                                                                                                                                                                           GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                           23,
                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                         01-MAR-2003 (TrEMBLrel.
01-MAR-2003 (TrEMBLrel.
01-MAR-2003 (TrEMBLrel.
Annexin A6.
                 SMART; SM00335; ANX; 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The FANTOM Consortium,
                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus (Mouse)
                                                                               Best Local Similarity
Matches 186; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                     SEQUENCE
                                                                       Match
                                                                                                                           11
                                                                                                                                             73
                                                                                                                                                                                 133
                                                                                                                                                                                                                                      191
                                                                                                                                                                                                                                                       253
                                                                                                                                                                                                                                                                        251
                                                                                                                                                                                                                                                                                           313
                                                                                                                                                                                                                                                                                                            311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                       Q8BSS4
Q8BSS4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
                                             Repeat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                       RESULT 7
                                                                       Query
                                                                                                                                                                                                                                                                                                                                                QBBSS4
g
                                                                                                                                            ò
                                                                                                                                                              a
                                                                                                                                                                                                g
                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                ç
                                                                                                                                                                                                                    ç
                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
```

```
ö
                      252
                                                                                                                                                                       312
                                                                                                                                                                                              246
                                                                                                         126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  127 NEVYKKEYGKTLEDAVCGDTSGMFQRVLSLLTAGRDESDKVDEAQAVKDAKDIFEAGEA 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99
  KOVYEEEYGSSLEDDVVGDTSGYYORMLVVLLOANRDPDAGIDEAOVEODAOALFOAGEL
                                                                                     KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                       SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KOVY EEEYGSSLEDDVVCDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SITE FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                four
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neoteleostei; Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha; Beloniformes; Adrianichthyldae; Oryzinae; Oryzinae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SWART; SM00335; ANX; 4.
PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             D2EED32C8676777D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-NOV-1998 (TrEMBLrel. 08, Created)
01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
01-NAR-2003 (TrEMBLrel. 23, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE-99025617; PubMed-9809745;
MEDLINE-99025617; PubMed-9809745;
Osterloh D., Wittbrodt J., Gerke V.;
Characterization and developmentally regulated expannexins in the Killifish medaka.";
DNA Cell Biol. 17:835-847(1998).
-!- DOMAIN: A PAIR OF ANNEXIN REPEATS MAY FORM ONE CALCIUM AND PHOSPHOLIPID (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
-!- SIMILARITY: CONTAINS 4 ANNEXIN REPEATS.
EMBL; Y11222; CAA72122.1; -
HSSP; P13214; IANN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ONE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Annexin max1.
Oryzłas latipes (Medaka fish) (Japanese ricefish).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  83;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 52.7%; Score 866; DB 13;
Best Local Similarity 54.5%; Pred. No. 4.5e-53;
Matches 170; Conservative 59; Mismatches 83;
                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             320 AA; 35424 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPR001464; Annexin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                     311 GEYKKALLKLCGGDD 325
                                                                                                                                                                                                                                                          GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pfam; PF00191; annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=8090;
                                                                                  193
                                                                                                                                                                       253
133
                                                                                                                                                                                                                                                          313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SECUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
```

ហ

us-09-970-969-6.rspt

```
313 GDYKKALLLLSGEDD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0921F1
                                                                                                                                                                     290X16;
                                                                                                                                             90X16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 11
Q921F1
                                                                                                     RESULT 10
                                                                                                                                                                   δŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ã
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    qq
                                     쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                         KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         annexins in the killifish medaka.";
DNA Cell Biol. 17:835-847(1998).
-!- DOMAIN: A PAIR OF ANNEXIN REPEATS MAY FORM ONE BINDING SITE FOR CALCIUM AND PHOSPHOLIPID (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
-!- SIMILARITY: CONTAINS 4 ANNEXIN REPEATS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WEDINE-99025617; PubMed-9809745;
Osterloh D., Wittbrodt J., Gerke V.;
"Characterization and developmentally regulated expression of four
                                                                                                                                                                                                                                                                                                                                                    Annexin max4.
Oryzias latipes (Medaka fish) (Japanese ricefish).
Eukaryota; Metazoa; Chordata; Cranlata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha;
Beloniformes; Adrianichthyidae; Oryziinae; Oryzias.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       52.1%; Score 856; DB 13; Length 508; 55.2%; Pred. No. 4.4e-52; tive 51; Mismatches 90; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3C6728D475CAE430 CRC64;
                                                                                                                                                                                                                                                                                                              01-NOV-1998 (TrEMBLrel. 08, Last sequence update) 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
                                                                                                                                                                                                                                                                                             Created)
                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 508 AA; 53051 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; Y11255; CAA72125.1; --
HSSP; P79134; IAVC.
InterPro; IPR001464; Annexin.
InterPro; IPR066031; XYPPX.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                        01-NOV-1998 (TrEMBLrel. 08, 01-NOV-1998 (TrEMBLrel. 08,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pfam; PF00191; annexin; 4. Pfam; PF02162; XYPPX; 15.
                                                                                                 GDYKKALLLLSG 324
                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SMART; SM00335; ANX; 4.
                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               al Similarity
174; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=8090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73
                                                       247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Repeat.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Loc
Matches
                                                                                                                                                                                                         Φ
                                                                                                                                                                                                         RESULT
                                                                                                                                                                                                                                                   SOW WENT TO THE PROPERTY OF TH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                       셤
                                                                                                   ò
                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIPAYLAETLYYAMKGAGTDDHTLIRVMYSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7 KGTIKPYPNFNAADDVQKLRNAMKGAGTDEDAVIDVIANRTLSQRQEIKTAYKTTVGKDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       73 LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                         Seville R.A., Nijar S., Barnett M.W., Jones E.A.;
"Annexin 4 (Xanx-4) has a role in the development of the pronephric tubules in Xanopus laevis.";
Submitted (JUN.2010) to the EMBL/GenBank/DDBJ databases.
-1- DOMAIN: A PAIR OF ANNEXIN REPEATS MAY FORM ONE BINDING SITE FOR CALCIUM AND PHOSCHOLIPID (BY SIMILARITY).
-1- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
-1- SIMILARITY: CONTAINS 4 ANNEXIN REPEATS.
EMBL; AY039235; AAK83461.1; --
                                                                                                                                                                                                                                                      Xenopus laevis (African clawed frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 321;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5C28CAFAAC17687D CRC64;
                                                                                                                                                                                              Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            51.7%; Score 849; DB 13;
54.0%; Pred. No. 7.1e-52;
ive 55; Mismatches 90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ä
                                                                                                                                      Ā
                                                                                                                                    321
                                                                                                                                                                            Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-DEC-2001 (TrEMBLrel. 19, Created)
                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    35801 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     InterPro: IPR001464; Annexin.
Pfam; PF00191; annexin; 4.
PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GDYKKALLLLSGEDD 327
                                                                                                                                                                         01-DEC-2001 (TrEMBLrel. 19, 01-DEC-2001 (TrEMBLrel. 19, 01-MAR-2003 (TrEMBLrel. 23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 54.09
Matches 170; Conservative
                      494 GDYKNLLLKLCGSSD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SMART; SM00335; ANX; 4
                                                                                                                                                                                                                                                                                                                    Xenopus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         321 AA;
                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID-8355;
                                                                                                                                                                                                                                                                                                                  Xenopodinae;
                                                                                                                                                                                                                                        Annexin 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q921F1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a S E
```

9

```
Annexin VIII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                       Q95L54
   ò
                                                                                                                                                   g
                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                    a
                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                          Q
                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                            LDDLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI 132
                                                                                                                                                                                                                                                                                                                              SRAYKTEFQKTLEEAIRSDTSGHFQRLLISLSQGNRDESTNVDMSLVQRDVQELYAAGEN 368
                                                                                                                                                                                                                                                                                                                                                     KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL 192
                                                                                                                                                                                                                                                                                                                                                                                       193 KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEOLLLAVVKSIR 252
                                                                                                                                                                                                                                                                                                                                                                                                SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                  13 RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL 72
                                                                                                                                                                                                                                                                  Gaps
                                                                                     Bukaryota; Metazzoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
NCBI_TaxID=10090;
                                                                                                                                                                                                    PROSITE; PS00223; ANNEXIN; 4.
Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                               51.6%; Score 847; DB 11; Length 503; 53.7%; Pred. No. 1.9e-51; ive 59; Mismatches 87; Indels (
                                                                                                                                                                                                                               503 AA; 54079 MW; 33F3471EE21A0D32 CRC64;
 Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        327 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                  Pfam; PF00191; annexin; 4.
PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
01-DEC-2001 (TrEMBLrel. 19, 01-MAR-2003 (TrEMBLrel. 23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GDYRKILLKICGGND 503
                                                                                                                                                                                                                                                                                                                                                                                                                                                            GDYKKALLLESGEDD 327
                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08K2N9 PRELIMINARY;
08K2N9;
01-0CT 2002 (TEMBLEEL. 2
01-0CT -2003 (TEMBLEEL. 2
01-MAR-2003 (TEMBLEEL. 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
                   Similar to annexin All.
                                                                                                                                                                                               SMART; SM00335; ANX; 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similar to annexin A8
                                  Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus (Mouse).
                                                                                                                                                                                                                                                        al Similarity
169; Conserv
                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Strausberg R.;
                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                    73
                                                                                                                                                                                                                                                                                                                                                                      309
                                                                                                                                                                                                                                                                                                                                                                                                                         253
                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                            313
                                                                                                                                                                                                                                                          Local
                                                                                                                                                                                                                        Repeat.
                                                                                                                                                                                                                                                          Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ANXA8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q8K2N9
 a
                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                                                                       윱
                                                                                                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
```

```
140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  260
                                                                                                                                                                                                                                                                                                                                                                                                                                  141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                       80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                82 GRFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIKQVYEEEYG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           142 SSLEDDVVGDTSGYYQRMLVVLLQANRDPDAG-IDEAQVEQDAQALFQAGELKWGTDEEK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                201 FITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRSIPAYLAE
                                                                                                                                                                                                                                                                                                                                             22 FDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLLDDLKSELT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TLYYAMKGAGTODHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSGDYKKALL
                                                                                                                                                                                                                                                                                                     Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Supplement From M. M. Wallis G.A.;
Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
-!- DOMAIN: A PAIR OF ANNEXIN REPEATS MAY FORM ONE BINDING SITE FOR CALCIUM AND PHOSPHOLIPID (BY SIMILARITY):
-!- SIMILARITY: BELONGS TO THE ANNEXIN FAMILY.
-!- SIMILARITY: CONTAINS 4 ANNEXIN REPEATS.
EMBL; AF417631; AAL13308.1; -.
Interpro; IPR00144; Annexin.
Prfam; PF00191; annexin.
PRINTS; PR00196; ANNEXIN.
PRINTS; PR00196; ANNEXIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoldea;
Bovidae; Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Annexin; Calcium; Calcium-binding; Calcium/phospholipid-binding;
                                                                                                                                                                                                                                                                                                ä
                                                                                                                                                                                                                                                         DB 11; Length 327;
                                                                                                                                                                                                                                                                                                   Indels
Submitted (MAY-2002) to the EMBL/GenBank/DDBJ databases EMBL; BC030407; AAH30407.1; -. MGD: MGI:1201374; Anxa8.
                                                                                                                                                                                                            56DB9CFAFA8C2B21 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              36787 MW; 2EB178E13738CF22 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Created)
Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                    ; Score 840.5; DB 11;
; Pred. No. 2.9e-51;
49; Mismatches 79;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      327 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                            327 AA; 36724 MW;
                                                                    InterPro; IPR001464; Annexin.
Pfam; PF00191; annexin; 4.
                                                                                                              PRINTS; PR00196; ANNEXIN.
ProDom; PD000143; Annexin; 4.
SMART; SM00335; ANX; 4.
                                                                                                                                                                                                                                                      51.2%;
                                                                                                                                                                           PROSITE; PS00223; ANNEXIN; 4. SEQUENCE 327 AA; 36724 MW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROSITE; PS00223; ANNEXIN; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-DEC-2001 (TrEMBLrel. 19, 01-DEC-2001 (TrEMBLrel. 19, 01-MAR-2003 (TrEMBLrel. 23,
                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 57.89
Matches 177; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SMART; SM00335; ANX; 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bos taurus (Bovine).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                321 LLSGED 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          321 NLVGTD 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           327 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=9913
```

DB 6;

50.9%; Score 836.5;

~

313

193 253 253 313

134

```
135 VYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAG-IDEAQVEQDAQALFQAGELK 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         253 SIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTS 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14 TVKGSPHFNPVPDAETLYKAMKGIGTNEQAIIDVLTRRSSAOROOIAKSFKAQFGSDLTE 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of
                                                                                                                                                                                                           DLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAIKQ
                                                                                                                                                                                                                                                                                    194 WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS
                                                                                                                                                                                                                                                                                                                                                                                        254 IPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            73 LODLKSELTGKFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPEELRAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            133 KQVYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   193 KWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   189 KWGTDEDKFTEVICLRSFPQLKLTFDEYRNISQKDIEDSIKGELSGHFEDLLLAIVHCAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RGTVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The FANTOM Consortium, the RIKEN Genome Exploration Research Group Phase I & II Team; "Analysis of the mouse transcriptome based on functional annotation Nature 420:563-573(2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
NCBI_TaxID*10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 323;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          48.7%; Score 799; DB 11; Length 3
49.2%; Pred. No. 2.4e-48;
ive 63; Mismatches 97; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; AK090055; BAC41070.1; -. SEQUENCE 323 AA; 36356 MW; 9F69F57BCFAC6A85 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-22354683; PubMed-12466851;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              313 GDYKKALLLLSGEDD 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       314 DYKKALLLLSGED 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 49.29
Matches 155; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FISSUE-Kidney
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Annexin A3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q8C1X9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08C1X9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q8C1X9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A REPORT OF THE 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                      q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ŏ
                                                                         à
                                                                                                                            음
                                                                                                                                                                     ò
                                                                                                                                                                                                                        원
                                                                                                                                                                                                                                                                                 δý
                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cheng W., Tsao F.H.C.;
Cheng W. Company Four Homologous Repeats High Acris Sequence
Common To All Annexin.
Cheng W. Theologous Repeats W. Tenen
Cheng W. Coffer Revolution And PHOSPHOLIPID.
Cheng W. Coffer Revolution And Cheng W. Tenen
Cheng W. Theologous Profiled W. Cheng 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1;
                                                                                                                                                                                                254 IPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLFNIRKEFRKNFATSLYSMIKGDTSG 313
                                                                                                                                                                                                                                                                                                         VYEEEYGSSLEDDVVGDTSGYYQRMLVVLLQANRDPDAG-IDEAQVEQDAQALFQAGELK 193
                                                                                                                            TVTDFPGFDERADAETLRKAMKGLGTDEESILTLLTSRSNAQRQEISAAFKTLFGRDLLD 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15 TVTDFPGFDERADAETLRKAMKGLGTDEESILTILITSRSNAQRQEISAAFKTLFGRDLLD 74
                                                                                                                                                                                                                                                                                                                                                                                                           WGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETIDRETSGNLEQLLLAVVKSIRS
                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oryctolagus cuniculus (Rabbit).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Eutheria, Lagomorpha, Leporidae, Oryctolagus.
NCBI_TaxID=9986;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 327;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1815B77B6BE50AB7 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-MAY-1999 (TrEMBLrel. 10, Created)
01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 6;
                     Pred. No. 5.6e-51;
; Mismatches 84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Pred. No. 5.4e-50; 48; Mismatches 89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    50.1%; Score 822.5; 55.9%; Pred. No. 5.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Annexin A8 (Annexin 8) (Annexin VIII).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ANNEXIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ANNEXIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ANNEXIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
55,9%; Pic. 53;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              36680 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DYKRALLLLSGED 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 50.1
Best Local Similarity 55.9
Matches 175; Conservative
                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             195
270
327 AA;
                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ANXAB OR ANXB.
                  Local Simi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REPEAT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                             194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         314
                                                                                              13
                                                                                                                                                                                                                                                                                                                                                                                                                                                              194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           097529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REPEAT
                     Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 14
097529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                          g
                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                       ò
```

ö

72 **6**B 132

qq

309 GDYRTVLLKICGEDD 323

Search completed: August 22, 2003, 21:35:26 Job time : 32.6667 secs

BX396240 BX396240 BX379218 BX379218

-

AL542496 AL542496
BX358605 BX358605
BX458605 BX358605
AL547761 AL547761
AL517516 AL547761
AL517516 AL547761
AL517516 AL547761
AL517516 AL547761
AL517516 AL547761
BX55074 BX355074
BX365074 BX365074
BX365074 BX365074
BX36030 BX46030
BX46033 BX466033
BX381687 BX31687
BX361687 BX31687
BX361697 BX31687
BX361697 BX361687
BX464033 BX464033
BX464033 BX464033
BX464030 BX446020
BX396098 BX396098
BX396098 BX396098
BX396098 BX396098
BX396098 BX396038
BX367213 BX340213
BX367256 AL537256
AL537256 AL537256

AL542496 BX328605 BX402751 AL517516 AL517516 AL547761 AL547412 AL5479 BX165074 BQ229583 BX381687 BX381687 BX381687 BX381687 BX381687 BX466033 BX466033 BX46603 BX39553 BX48020 BX397519 BX337719

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Direct Submission
Submitted (06-JUN-2002) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Email: capebs-remail.nih.gov
Tissue Procurement: ArC/DCTD/DTP
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Baylor College of Medicine Human Genome
Sequencing Center
Center code: BCM-HGSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1602 bp mRNA
Homo sapiens, clone IMAGE:3924873, mRNA.
BC032093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BC032093.1 GI:21327830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (bases 1 to 1602)
12001
12001
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
100000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
100000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
100000
10000
10000
10000
10000
10000
10000
10000
10000
10000
100000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
100000
10000
10000
10000
10000
10000
10000
10000
10000
10000
10000
1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
771.8
771.4
775.6
760.8
760.8
741.2
738.4
738.4
738.4
738.4
738.4
738.4
738.4
738.4
738.4
738.4
855.2
851.6
839.6
838.4
835.8
832.2
831.6
828.6
828.6
                                                                                                                                                          806.8
791.2
789.6
                                                                                                                                                                                                     788.2
785.2
782.4
782.2
779.8
777.2
774.4
774.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BC032093
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1
 BC032093 Homo sapi
BM464122 AGENCOURT
BX441583 BX441583
BX379189 BX379189
                                                                                                                  (without alignments)
14228.779 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                      981
                                                                                                 August 28, 2003, 15:48:20; Search time 1675.67 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Description
                                                                                                                                                                                         1 atggcatgtggctgcggtca.....tgctctccggagaagatgac
             GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                             22781392 seqs, 12152238056 residues
                                                                                                                                                                                                                                                                                       fotal number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BC032093
BM464122
BX441583
BX379189
                                                                                                                                                                                                                                                                                                                                                                                                 summaries

    nucleic search, using sw model

                                                                                                                                                                                                                   IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                               Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first, 45 su
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     em_gss_mus:*
em_gss_pro:*
em_gss_rod:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               em_gss_phg: *
em_gss_vrl: *
gb_gssl: *
                                                                                                                                                                                                                                                                                                                        Minimum DB seq length: 0 Maximum DB seq length: 20000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                em_gss_hum: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               em_gss_inv:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gb_est5:*
em_estfun:*
em_estom:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             em_gss_pln:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           em_gss_vrt:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          em_gss_fun:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      em_gss_mam:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13 13 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              em_estro:*
em_htc:*
gb_est1:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      em_estin:*
em_estmu:*
em_estov:*
em_estpl:*
                                                                                                                                                             us-09-970-969-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                        em_esthum:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gb_htc: *
gb_est3: *
gb_est4: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gb_gss2:*
                                                                                                                                                                                                                                                                                                                                                                                                                                         em_estba:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gb_est2:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1602
1076
1071
1201
                                                                                                                                                                                                                                                                                                                                                                                                                           EST:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97.6
89.1
88.5
87.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          957.8
874.4
868.2
858.4
                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                         Perfect score:
                                                                      OM nucleic
                                                                                                                                                                                          Seguence:
                                                                                                                                                                                                                                                               Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                           Database
                                                                                           Run on:
```

BX449042 BX449042 BX461471 BX461471 BU167199 AGENCOURT BQ877512 AGENCOURT BG39777 602410103 BG767111 602740475 BX397346 BX377346

BX340213 BX424940 BX399821 AL537256 AL557433 BX449042

13

113

0 1 1 3 3 3

AU117640 AU117640 BX377166 BX377166 BM016480 603641294

HTC 06-JUN-2002

linear

Result Š

ALIGNMENTS

 \sim

```
1076 bp mRNA linear EST 05-FEB-2002 ACENCOORT_6445585 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:5540173 BM464122
                                                                                                                                                                                                                                              960
                                                                                                                                                              920
                                   800
                                                               933
                                                                                                               921 TAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGA 980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  105 ATGGCACAGGTTCTCAGAGGCACTGTGACTGCACTGCATTTGATGAGGGGGCTGAT 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note-"Organ: skin; Vector: pCMV-SPORT6; Site_1: Not1; Site_2: Sal1; Cloned unidirectionally. Primer: Oligo dT. Average insert size 2 kb. Library constructed by Life
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Craniata; Vertebrata; Euteleostomi;
Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Robert Strausberg, Ph.D.

Email: cgapbs-rémail.nih.gov
Tissue Procurement: ATCC/DCTD/DTP

CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bloscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://mage.llnl.gov
Plate: LLAM12235 row: n column: 14
High quality sequence stop: 708.
Location/Qualifiers
rce
                                 814 AATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGT
                                                                                                  GGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGA
                                                                                                                                                                  TCTGTTTAACATCAGGAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Educational Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 12; Length 1076;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism-"Homo sapiens"
/mol_type-"mRNA"
/db_xref='taxon:9606"
/clone_'IMAGE:5540173"
/tlasue_type="melanotic melanoma"
/lab_host='DH10B (phage-resistant)"
/clone_lib="NIH_MGC_72"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 874.4; DB 12;
Pred. No. 1.4e-223;
0; Mismatches 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      274 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      273 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BM464122.1 GI:18513164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Technologies.
229 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 96.9%;
Matches 932; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                          1114 C 1114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      296
                                                                                                                                                                                                                                                                                            981 C 981
                                                                                                                               934
                                                                                                                                                                                                                                                          1054
                                   741
                                                                                                801
                                                                                                                                                                861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22
                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                        RESULT 2
BM464122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                   ò
                                                               셤
                                                                                                  ò
                                                                                                                             d
                                                                                                                                                              ò
                                                                                                                                                                                              g
                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 qq
                                                                                                found
                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       560
                                                                                                                                                                                                                                                                                                                                                                                                                                                     320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGAC 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGA 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAA 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 561 TCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAAC 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 740
                                                                                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                          Clone distribution: MGC clone distribution information can be for through the I.M.A.G. E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 26 Row: f Column: 11 This clone has the following problem: no 5' EST match. Location/Qualifiers
                                   Hulyk, S.W., Hale, S.M.,
Martin, R.G., Muzny, D.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AATTGTGGCTCTGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 694 TCAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                     TATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCCTGGATTTGATGAGCGGGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                       Length 1602;
                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                          телапота."
Web site: http://www.hgsc.bcm.tmc.edu/cdna/
Contact: amg@bcm.tmc.edu
Gunaratne, P.H., Garcia, A.M., Lu, X., Huly,
Yoon, V.S., Kowis, C.R., Lawrence, S., Mart.
Richards, S., Gibbs, R.A.
                                                                                                                                                                                                                                                                                                                                                                        DB 11;
                                                                                                                                                                                         /organism="Homo saplens"
/mol_type="mkmy 4%
/db_xref="taxon:9666"
/clone="iMaGE:3924873"
/tissue_type="Skin, melanotic me
/clone_lib="NH_MGC_72"
/lab_host="DH108"
                                                                                                                                                                                                                                                                                                                                                                     97.6%; Score 957.8; DB 11
99.8%; Pred. No. 6.9e-246;
                                                                                                                                                                                                                                                                                                       /note="Vector: pCMV-SPORT6"
337 c 364 g 452 t
                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                     959; Conservative
                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                     21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              681
                                                                                                                                                                                                                                                                                                                                                                                        Best Local
                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                      BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                              FEATURES
```

윱

ö

8

õ g à

ö

g

ö g δ g

g ð g

g ö

à 유 ò a

õ

ç 셤 ð g õ a õ g ö g ò g õ 셤 ò

```
247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    667
                                                                                                                                                                                                                                                                                                                                                                 /clone_lib="Bonds sapiens FETAL BRAIN"
/rolone_lib="Bonds sapiens FETAL BRAIN"
/note="Organ: brain; Vector: pcMvSPORT_6; 1st strand cDNA
was primed with a NotI-oligo(dT) primer. Five prime end
enriched, double-strand cDNA was digested with Not I and
cloned into the Not I and EcoRV sites of the pcMvSPORT 6
vector. Library was not normalized."

229 c 274 g 272 t 5 others
                                                                                                                                                                                                                   ٠.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80
                                       Euteleostom1;
                                                                                                                       Genoscope - Centre National de Sequencage
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
http://www.genoscope.cns.fr/
cgi-bin/Cluster.cgirseq-CSODF019AF066P1&cluster-2353.r. Contact :
Frog Liang Email : fliang@lifetech.com URL :
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID : CSODF013AF066P1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCCACAGATGAGGAGAGCATCCTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCCTTCAGGCTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                    Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1071;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ó
                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                 Mammalia; Eutheria; Primates; Catarrhini; Hor
1 (bases 1 to 1071)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-length cDNA libraries and normalization
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 868.2; DB 13;
Pred. No. 6.4e-222;
1; Mismatches 5;
                                                                                                                                                                                                                                                                                                /mol_type="mrNA"
/do_xref="taxon:9606"
/clone="CSODF019YK11"
/tissuc_type="feral"
/dev_stage="feral"
                                                                                                                                                                                                                                                                                              sapiens"
                                                                                                                                                                                                                                                                                           /organism="Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tch 88.5%;
al Similarity 99.3%;
870; Conservative
             sapiens (human)
                                                                                                                Contact: Genoscope
                                                                                                                                                                                                                                                                               1. .1071
                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                               291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
                                                                                                                                                                                                                                                                                  source
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                               BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tches
                                                            REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1071 bp mRNA linear EST 15-MAY-2003
FETAL BRAIN HOMO sapiens CDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        404
                                                                                                                                                                                                                                                                  441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            918
                                                                                                                                                                321
                                                                                                                                                                                                                 381
                                                                                                                                                                                                                                         464
                                                                                                                                                                                                                                                                                                                                                                    561
                                                                                                                                                                                                                                                                                                                                                                                             644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   944
                                      224
                                                             201
                                                                                     284
                                                                                                               261
                                                                                                                                        344
                                                                                                                                                                                                                                                                                           524
                                                                                                                                                                                                                                                                                                                    501
                                                                                                                                                                                                                                                                                                                                            584
                                                                                                                                                                                                                                                                                                                                                                                                                      621
                                                                                                                                                                                                                                                                                                                                                                                                                                               704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         801
                                                                                                                                                                                                                                                                                                                                                                  GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                      CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                         ATTGTGGCTCTGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                             AAGGGAGCTGGAACAATGAAAAGTACTGACAGAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                            GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGGAGGATGAC
                                                                                                                                                                                                                                                                              CGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCANGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTT-CCAGGAGTGAGATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTGTTTAACATCA-GGAAGGAGTTTAGGAAGAATTTTG-CCACCTCTCTTTATTCCATG
                                                                                                                                                                                                                                                                                                                   GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BX441583 Homo saplens FETAL BRAIN HO CSODF019YK11 5-PRIME, mRNA sequence. BX441583.1 GI:30775951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ||
| AT 1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ΑŢ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1005
                                                                                                              202
                                                                                                                                                              262
                                                                                                                                                                                       345
                                                                                                                                                                                                                                                                 382
                                                                                                                                                                                                                                                                                                                                                                                            585
                                                                                                                                                                                                                                                                                                                                                                                                                                             645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1065
                                   165
                                                            142
                                                                                   225
                                                                                                                                                                                                                322
                                                                                                                                                                                                                                      405
                                                                                                                                                                                                                                                                                        465
                                                                                                                                                                                                                                                                                                                 442
                                                                                                                                                                                                                                                                                                                                         525
                                                                                                                                                                                                                                                                                                                                                                   202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       682
          82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BX441583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COCUS
```

g

g

ö g ò 셤 ö ద õ 요 ò g ö 셤 ò 셤

ò

ó

Fri

à g à ద ò 윱 ò 셤 à 원

셤

ð

ò

ñ

```
1042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BX417429 1101 bp mRNA linear EST 13-MAY-2003
BX417429 Homo sapiens PLACENTA Homo sapiens cDNA clone CSODE009Y116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              262
                                                                                                            141
                                                                                                                                        322
                                                                                                                                                                    201
                                                                                                                                                                                            382
                                                                                                                                                                                                                        261
                                                                                                                                                                                                                                                   442
                                                                                                                                                                                                                                                                              321
                                                                                                                                                                                                                                                                                                         502
                                                                                                                                                                                                                                                                                                                                     381
                                                                                                                                                                                                                                                                                                                                                                562
                                                                                                                                                                                                                                                                                                                                                                                           441
                                                                                                                                                                                                                                                                                                                                                                                                                     622
                                                                                                                                                                                                                                                                                                                                                                                                                                                501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       802 GCAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT -861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              921
                                                          81
                                                                                                                                                                                    AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                  GTGAAATCTATTCGAAGTATACCTGCCTACCAGGAGACCCCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCCATGATT
                                                        22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                       GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                              CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                     ATTGTGGGTCTGATGAAACCCTCTGGGTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                            GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGGTGGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          682 ATTGAGGAAACCATTGACGCGAGACTTCTGGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                               Gaps
                              9
    Length 1201
                              Indels
 DB 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  87.5%; Score 858.4; DB 13
94.9%; Pred. No. 2.9e-219;
ive 15; Mismatches 27;
                             892; Conservative
               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1100
                                                                                                            82
                                                                                                                                                                     142
                                                                                                                                                                                               323
                                                                                                                                                                                                                         202
                                                                                                                                                                                                                                                   383
                                                                                                                                                                                                                                                                               262
                                                                                                                                                                                                                                                                                                                                     322
                                                                                                                                                                                                                                                                                                                                                                503
                                                                                                                                                                                                                                                                                                                                                                                           382
                                                                                                                                                                                                                                                                                                                                                                                                                      563
                                                                                                                                                                                                                                                                                                                                                                                                                                                   442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           923
    Query Match
                 Best Local
Matches 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 5
BX417429
                                                                                                                                        셤
                                                                                                                                                                                              a
                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           윰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   윱
                                                          ö
                                                                                    윱
                                                                                                              ò
                                                                                                                                                                    ö
                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                     õ
                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ογ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               윤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       //organism="Homo sapiens"
//organism="Homo sapiens"
//mol_type="mRNA"
//db_xref="taxon:9606"
//clone="CSODI030YL18"
//tissue_type="Packery COT 25-NORVALIZED"
//clone_lib="Homo sapiens PLACENTA COT 25-NORVALIZED"
//clone_lib="Homo sapiens PLACENTA COT 25-NORVALIZED"
//note="list strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was
digested with Not I and cloned into the Not I and EcoR V
sites of the pCMVSPORT 6 vector. Library was normalized."
07 a 263 c 295 g 294 t 42 others
                                                                                                                                                                                                                                                                                         BX379189 1201 bp mRNA linear EST 08-MAY-2003 BX379189 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens CDNA clone CSODIO30YL18 5-PRIME, mRNA sequence.
BX379189 GI:30446777
                                                                                                                                                                                                                                                                                                                                                                                                                                                   EST 08-MAY-2003
                                                                                                                            9
                                                                                                                                                                                  740
                                                                                                                                                                                                                                      800
                                                                     620
                                                                                                                                                                                                            907
                                                                                               787
                                                                                                                                                       847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Bummalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1201)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-length cDNA libraries and normalization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Genoscope
Genoscope - Centre National de Sequencage
Genoscope - Centre National de Sequencage
Bright 91006 EVRY cedex - France
Email: seqrefégenoscope.cns.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r Formore information about this cluster, see
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=csODI030DF09QPl&cluster=2353.r. Contact
cgi-bin/cluster.cgi?seq=csODI030DF09QPl&cluster=2353.r. Contact
Feng Liang Email: filangelifetech.com NRL:
http://fulllength.uvitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CSODI030DF09QPl.
Location/Qualifiers
                                                                                                                                                                                                                                                   ACGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCA
                                                                                                                                                                                              TGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAA
             ACGAAGKTGTNCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCA
                                                                                                                                                                                 AATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTTGCTGT
                                                                                                                                                                                                                                                                                                                                                sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                           848
                                                                                                                                                                                                                                                                                                                     896
                                        668
                                                                                              728
                                                                                                                         621
                                                                                                                                                     788
                                                                                                                                                                                                                                     741
                                                                                                                                                                                                                                                               806
                                                                                                                                                                                                                                                                                         801
                                                                                                                                                                                                                                                                                                                                                861
                                                                                                                                                                                 681
              501
                                                                    561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 4
BX379189
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
```

S

685

561

621 805 681 865 741 925 801 985

```
BX398791 996 bp mRNA linear EST 13-MAY-2003
BX398791 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens CDNA
clone CSODI064YH19 5-PRIME, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1046 CTGTTTA----MATCAGGAGGAGTTAGGGAGAATTTGCCACCTCTCTTATTCATGATTA 1101
                                                                                            CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCCATGATT 921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. Li (bases 1 to 996)
Li W. B., Gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA libraries and normalization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Bmall: seqrefégenoscope.cns.fr web : www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq-cS0D1064CD100Plscluster-2353.r. Contact:
Feng Liang Email : fliang@lifetech.com URL:
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID : CSOD1064CD100Pl.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTGAGGAAACCATTGACCGCGAGACTTCTGGCCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                  CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                            CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism-"Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BX398791.1 GI:30613780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HOMO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1102
                                                                                                                    989
                                                                                                                                                               562
                                                                                                                                                                                                                                                              622
                                                                                                                                                                                                                                                                                                          906
                                                                                                                                                                                                                                                                                                                                                        682
                                                                                                                                                                                                                                                                                                                                                                                                   998
                                                                                                                                                                                                                                                                                                                                                                                                                                                 742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   922
                          526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 6
BX398791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                      ó
                                                                                                               g
                                                                                                                                                               ŏ
                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                     õ
                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                               ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo saplens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/dlone="CSOBCO9Y116"
/clone_lib="Homo saplens PLACENTA"
/clone_lib="Homo saplens"
/clone_lib="homo s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               322 AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 442 GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC 501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                          Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
BP 191 91006 EVRY cedex - France
BM 11: seqrefégenoscope.ons.fr, web : www.genoscope.ons.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
more information about this cluster, see
http://www.genoscope.ons.fr/
cg1-bin/cluster.cgi?seq-CSODE009BE08QPl&cluster-2353.r. Contact :
Feng Liang Email : fliang@lifetech.com URL :
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID : CSODE009BE08QPl.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           262 ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 13; Length 1201;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30; Indels
                                                                                                                                                                              1 (bases 1 to 1201)
LI,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-length cDNA libraries and normalization
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Score 855.2; DB 1.; Pred. No. 2.1e-218
10; Mismatches 30
5-PRIME, mRNA sequence.
BX417429
BX417429.1 GI:30654405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       87.2%;
95.0%;
                                                                                              sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             al Similarity 95.0%
893; Conservative
                                                                                                                                                                                                                                                                                 Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. 1201
                                                                                                                    Homo sapiens
                                                                                              Homo
                                                                      EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               386
                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BASE COUNT
ORIGIN
                     ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                              TITLE
JOURNAL
COMMENT
                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    合
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
```

••

```
141
                                                                                                                                                                                                                        420
                                                                                      381
                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                           261
                                                                                                                                                                                                          321
                                                                                                                                                                                                                                                                         441
                                                                                                                                                                                                                                                                                                      501
                                                                                                                                                                                                                                                                                                                                     561
                                                                                                                                                                                                                                                                                                                                                     999
                                                                                                                                                                                                                                                                                                                                                                     621
                                                                                                                                                                                                                                                                                                                                                                                   720
                                                                                                                                                                                                                                                                                                                                                                                                                  779
                                                                                                                                                                                                                                                                                                                                                                                                                                                  839
                                                                                                                                                                                                                                                                                                                                                                                                   681
                                                                                                                                                                                                                                                                                                                                                                                                                                   741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  801
primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and ECOR V sites of the DCWVSPORT 6 vector Library was normalized. I 192 c 248 g 256 t 18 others
                                                                              81
                                                                                                                                                                         AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                              GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                    AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                             CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTTGGAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGCCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                        GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                      GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                     AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTGAGGAAACCATTGACGGGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                              Gaps
                                                Length
                                                              5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 851.6; DB 13;
Pred. No. 1.8e-217;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTG 898
                                                              15; Mismatches
                                               86.8%;
97.6%;
                                                              Conservative
                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                    601
                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               862
                                               Match
                                                                                           131
                                                                                                            82
                                                                                                                           181
                                                                                                                                           142
                                                                                                                                                          241
                                                                                                                                                                          202
                                                                                                                                                                                          301
                                                                                                                                                                                                          262
                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                         322
                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                       382
                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                      442
                                                                                                                                                                                                                                                                                                                                    502
                                                                                                                                                                                                                                                                                                                                                                    562
                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                  622
                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                  682
                                                                                                                                                                                                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900
                                                       Local
                                                       Best Loca
Matches
                        BASE COUNT
                                               Ouery
                                                                             ð
                                                                                          g
                                                                                                           ò
                                                                                                                        a
                                                                                                                                                      g
                                                                                                                                                                      ò
                                                                                                                                                                                       g
                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                      윰
                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                           õ
                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
```

RESULT 7 BX396240

```
//organish="Homo saplens"
/mol_type="mRNA"
/do_xref="taxon:9606"
/do.xref="taxon:9606"
/clone="CSODIO14Y109"
/tissue_type="PLACENTA COT 25-NORMALIZED"
/clone_llb="Homo saplens placenta COT 25-NORMALIZED"
/clone_llb="Homo saplens placenta COT 25-NORMALIZED"
/clone="lst thrond cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was
digasted with Not I and cloned into the Not I and EcoR V
sites of the pCWVSPORT 6 vector. Library was normalized."
85 a 234 c 272 g 270 t lothors
                                                                                                                                                                                                                                                                                    Contect: Genoscope
Contect: Genoscope
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Email: seqreféqenoscope.cns.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi.bin/cluster.cgi/seq-Cs0bl014AE05QPl&cluster-2353.r. Contact :
Feng Liang Email: fliang@lifetech.com UKL:
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CS0bl014AE05QPl.

I. .1062
  EST 13-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
p mRNA linear EST 13-MAY-200:
COT 25-NORMALIZED Homo sapiens CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    627
                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. Libasa; 1 to 1062)
Liw. B., Gruber, C., Jessee, J., and Polayes, D.
Full-length, CDNA libraries and normalization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              268 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCTGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               142 CTGTTGACATCCCGAAGTAATGCTCAGCGCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ch 86.5%; Score 848.2; DB 13; Length 1062.
11 Similarity 99.4%; Pred. No. 1.5e-216;
850; Conservative 1; Mismatches 4; Indels 0;
                     BX396240 Homo sapiens PLACENTA COT 25.NOKo
clone CS0DI014Y109 5-PRIME, mRNA sequence.
                   Homo sapiens PLACENTA
                                                                               BX396240.1 GI:30624830
                                                                                                                      Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                   Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               322
  LOCUS
                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BASE COUNT
ORIGIN
                                                                                                                                                                                                                            AUTHORS
TITLE
JOURNAL
                                                                             VERSION
KEYWORDS
SOURCE
                                                              ACCESSION
                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                           COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
```

^

쉱 õ 셤 õ g à 셤 à 셤

ò

g ð 음 ò 음

ò

```
621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           895
                                                                                                                                                                                                                                                                                                                                                                                      537
                                                                                                                                                                                                                                                                                                                                                                                                                441
                                                                                                                                                                                                                                                                                                                                                                                                                                           597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    801
                                                                                                         237
                                                                                                                                                141
                                                                                                                                                                       297
                                                                                                                                                                                                  201
                                                                                                                                                                                                                           357
                                                                                                                                                                                                                                                     261
                                                                                                                                                                                                                                                                             417
                                                                                                                                                                                                                                                                                                        321
                                                                                                                                                                                                                                                                                                                                477
                                                                                                                                                                                                                                                                                                                                                            381
                                                                                           83
                                                                                                                                                                                                                                                    742 GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGCCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGATT
                                                                                            ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTCCCTGGATTTGATGAGGGGGCTGAT
                                                                                                         82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                                              142 CTGTTGACATCCCGGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                AAGGGAGCTGGAACAAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                  GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGAAGTGTGTCTCATTTGAGAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
                                                                  Gaps
                                        Length 1201;
                                                                  8
others
                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1073 ARGGGGAAAATCT---GGGGMTATAGAAACCCTCTKCTGC 1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGC 961
                                        839.6; DB 13;
No. 3.3e-214;
matches 25;
                                                                   Mismatches
  296
                                         Score
Pred.
    σ
  291
                                                                 11;
                                        85.6%;
95.3%;
    U
                                                                  896; Conservative
  257
                                                      Similarity
    ø
  319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               622
                                                                                           22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             598
                                                                                                                                                                                                                                                                                                                                                             322
                                                                                                                                                                                                                                                                                                                                                                                                                382
                                         Query Match
Best Local 9
  BASE COUNT
                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     on
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT
               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                 Dp
                                                                                                                                                δ
                                                                                                                                                                                                οy
                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                     οχ
                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                        Óγ
                                                                                                                                                                                                                                                                                                                                đ
                                                                                                                                                                                                                                                                                                                                                             ŏ
                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δŽ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                              ð
                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BX379218

BX379218 Homo sapiens PLACENTA COT 25-NORMALIZED Homo sapiens cDNA clone CSODI031Yal6 5-PRIME, mRNA sequence.

BX379218.1 GI:30452736
                                                                                                                                                                                                                                                                                                                                   681
                                                                                                                                                                                     867
                                                                                                                                                                                                                                                                                                                     861
                           687
                                                                               747
                                                                                                         621
                                                                                                                                 807
                                                                                                                                                                                                                741
                                                                                                                                                                                                                                         927
                                                                                                                                                                                                                                                                  801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="make Saptens"
/mol_type="make Saptens"
/db_xref="taxon:9506"
/db_xref="taxon:9506"
/clone="csobolo31yal6"
/tissue_type="tayloan Saptens Placenya COT 25-NORWALIZED"
/clone=lib="Homo sapiens Placenya COT 25-NORWALIZED"
/note="lst strand cDNA was primed with a NotI-oligo(dT)
primer. Five prime end enriched, double-strand cDNA was
digested with Not I and cloned into the Not I and EcoR V
sites of the pCMVSPORT 6 vector. Library was normalized."
                                                      561
                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Emali: seqreféqenoscope.cns.fr, Web : www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
more information about this cluster, see
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              http://www.genoscope.cns.fr/
cgi.bin/cluster-2353.r. Contact
cgi.bin/cluster.cgi?seq-CsOD1031BA080P1&cluster-2353.r. Contact
Feng Lidang Email: filang@lifetech.com URL:
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CSOD1031BA08QP1.
Location/Quallifiers
                                                                                                                                                                                                             CAGGCTGGAGAACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTTGGAACA
                                                                                                                     CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                         GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG
                                                                                                                                                                                                                                                                                                                     GGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT
 GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCTCTTCAGGCTAAC
                                                      AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 1201)
Li.W.B., Gruber, C., Jessee, J. and Polayes, D.
Full-length cDNA libraries and normalization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                         862 CIGITIAACAICAGG 876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 saptens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo saptens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EST
                                                    502
                                                                                                        295
                                                                                                                                 748
                                                                                                                                                           622
                                                                                                                                                                                                                                                                  742
                                                                                                                                                                                                                                                                                                                     802
 442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 8
BX379218
LOCUS
```

8

680

646

501

706 621 766

561

739

```
BX358605 1076 bp mRNA 11neur EST 05-MAY-2003 3X358605 Homo sapiens PLACENTA COT 25-NORWALIZED Homo sapiens CDNA CLONE CSODIO41YIO2 5-PRIME, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                  800 AGGGACCTGGGACAGGATGATCATACCCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTG 859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutcleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 1076)
Li, W.B., Gruber, C., Jessee, J. and Polayes, D. Full-length cDNA libraries and normalization Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon19606"
/clone_type="placenta cor 25-NORWALIZED"
/clone_lib="Homo sapiens Placenta COT 25-NORWALIZED"
/note="lst strand cDNA was primed with a NotI-oligo(dT)
                                                                                                                                                                             GTGGTGGGGGACACTTCAGGTACTACCAGCGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                 AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                             CGAAGTGTGTCTCA-TTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCA
                                                                                                                                                                                                                                                                                                          681 AATTGAGGAAACC-ATTGACGGGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTG
                                                                                                                                                                                                                                                                                                                         GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTT 910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BX358605.1 GI:30382268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EST.
                                                                                                               502
                                                                                                                                                                               562
                                                                                                                                                                                                           707
                                                                                                                                                                                                                                            622
                                                                                                                                                                                                                                                                                                                                        827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1001
                   527
                                                  442
                                                                                                                                                                                                                                                                         167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 10
BX358605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                 ò
                                                                                8
                                                                                                               ò
                                                                                                                                           유
                                                                                                                                                                               õ
                                                                                                                                                                                                           8
                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              윤
                                                                                                                                                                                                                                                 Contact: Genoscope
Genoscope - Centre National de Sequencage
Genoscope - Centre National de Sequencage
Genoscope - Centre National de Sequencage
Genoscope - Centre National de Sequence
Bap 191 91006 EVRY cedex - France
Email: sequefégenoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r. For
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-lang Email: filangellifetech.com URL:
Feng Liang Email: filangellifetech.com URL:
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CSODE012BE07QP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /tissue_type="PlaCENTA"
/clone_lib="Homo saptens PLACENTA"
/clone_lib="Homo saptens PLACENTA"
/note="Wector: PCMVSPORT_6; lst strand cDNA was primed
with a NotI-oligo(dT) primer. Five prime end enriched,
with a NotI-oligo(dT) primer. Five prime end enriched,
double-strand cDNA was digested with Not I and cloned into
the Not I and EcoRV sites of the pCMVSPORT 6 vector.
Library was not normalized."
                  Omen Ilnear EST 12-MAY-2003
Homo saplens cDNA clone CS0DE012Y114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG 321
                                                                                                                                      Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 1201)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-length, cDNA libraries and normalization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGGGAGCTGGAACAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22 ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                        On Feb 15, 2001 this sequence version replaced gi:12874598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ë
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                85.5%; Score 838.4; DB 9; Length 1201; 98.2%; Pred. No. 6.9e-214; tive 3; Mismatches 10; Indels 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      48 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .1201
/organism="Homo saplens"
/dol_type="mRNA"
/db_xref="taxon:9666"
/clone="CSODE012Y114"
                   þ
                               AL542496 Homo sapiens PLACENTA
5-PRIME, mRNA sequence.
                                                              AL542496
AL542496.2 GI:30547699
                                                                                                               Homo saptens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
Matches 875; Conserva
                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BASE COUNT
ORIGIN
                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
                                DEFINITION
                                                                                                                              ORGANISM
                                                                                                                                                                                         AUTHORS
TITLE
JOURNAL
COMMENT
AL542496
LOCUS
                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            硆
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

g

```
1029
                                                   ä
                                                                                         141
                                                                                                                                                                                   490
                                                                                                                                                                                                                               250
                                                                                                      310
                                                                                                                   201
                                                                                                                               370
                                                                                                                                            261
                                                                                                                                                         321
                                                                                                                                                                                                381
                                                                                                                                                                                                     441
                                                                                                                                                                                                                                                   501
                                                                                                                                                                                                                                                                670
                                                                                                                                                                                                                                                                             561
                                                                                                                                                                                                                                                                                          730
                                                                                                                                                                                                                                                                                                                                 681
                                                                                                                                                                                                                                                                                                                                              849
                                                                                                                                                                                                                                                                                                                                                           741
                                                                                                                                                                                                                                                                                                                                                                       606
                                                                                                                                                                                                                                                                                                                                                                                    801
                                                                                                                                                                                                                                                                                                                                                                                                 696
                                                                                                                                                                                                                                                                                                                                                                                                               861
                                                                81
primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoR Vaites of the pCNVSPORF 6 vector. Library was normalized. 233 c 274 g 278 t 4 others
                                                                                                                                                                                                                                                                                                                               CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                            ATGGCACAGGTTCTCAGAGGCACTGTGACTGCCTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                       ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                         GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                   GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                            AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                  ë
                                     Length 1076
                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTT
                                                   Indels
                                      13;
                                     Score 835.8; DB 13
Pred. No. 3.3e-213;
4; Mismatches 16;
                                      85.2%;
97.4%;
                                                  866; Conservative
                                           Similarity
                   287
                                                               22
                                                                            16
                                                                                         82
                                                                                                     251
                                                                                                                              311
                                                                                                                                                        371
                                                                                                                                                                     262
                                                                                                                                                                                  431
                                                                                                                                                                                               322
                                                                                                                                                                                                            491
                                                                                                                                                                                                                        382
                                                                                                                                                                                                                                      551
                                                                                                                                                                                                                                                  442
                                                                                                                                                                                                                                                              611
                                                                                                                                                                                                                                                                            502
                                                                                                                                                                                                                                                                                                      295
                                                                                                                                                                                                                                                                                                                  731
                                                                                                                                                                                                                                                                                                                               622
                                                                                                                                                                                                                                                                                                                                             791
                                                                                                                                                                                                                                                                                                                                                                                                                                       862
                                                                                                                  142
                                                                                                                                           202
                                      Ouery Match
                                             Local
                   COUNT
                                             Best Loc
Matches
                        ORIGIN
                   BASE
                                                                         g
                                                                                                   윱
                                                                                                                            g
                                                                                                                                                      셤
                                                                                                                                                                               셤
                                                                                                                                                                                              ò
                                                                                                                                                                                                         g
                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                               임
                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                  ŝ
                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                ŝ
                                                                                       ô
                                                                                                                 ö
                                                                                                                                          ò
                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                      ç
```

RESULT 11 BX402751

```
Location/Qualiflers

1. 1007

/organism="hemo sapiens"

/organism="hemo sapiens"

/mol_type="mrNa"

/db_xref="taxon:9606"

/clone="csolidayA05"

/tissue=type="placenta COT 25-NORMALIZED"

/clone=list strand cDNA was primed with a NotI-oligo(dT)

primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and Ecow y sites of the pCMVSPORT 6 vector. Library was normalized."

77 a 216 c 257 g 256 t l others
EST 13-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     470
 OT 25-NORMALIZED Homo sapiens CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   590
                                                                                                                                                                                                                  Contact: Genoscope
Genoscope - Centre National de Sequencage
BP 191 91006 EVRT cedex - France
BP 191 91006 EVRT cedex - France
BM 191 91006 EVRT cedex - France
BM 191 91006 EVRT cedex - France
BM 191 000 Furtrogen. This sequence belongs to sequence cluster.

2353.r For more information about this cluster, see
http://www.genoscope.orm.fr/
cgi-bin/cluster.cgi?seq=CS1AI021Z6030P1&cluster=2353.r. Contact :
Feng Liang Email : fliangelifetech.com URL :
http://fulllength.in/trogen.com/ InfltroGen Corporation 1600
Faraday Avenue Genoscope sequence ID : CSIAI021Z6030P1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           81
                                                                                                                             Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGGGAGCTGGAACAATGAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGCCACAGGTTCTCAGAGGCACTGTCACTGCACTTCCCTGGATTTGATGAGCGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        142 CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                            Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                             Vertebrata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                      Eukaryota, Metazoa, Chordata, Craniata, Vertr
Mammalia; Eutheria, Primates; Catarrhini, Hor
1 (bases 1 to 1007)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 832.2; DB 13;
Pred. No. 2.9e-212;
0; Mismatches 3;
                            clone CSODI084YA05 5-PRIME, mRNA sequence.
BX402751
BX402751.1 GI:30607254
 1007 bp
               BX402751 Homo sapiens PLACENTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tch 84.8%;
al Similarity 99.6%;
834; Conservative
                                                                                          Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            277
                                                                            EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      262
             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BASE COUNT
ORIGIN
                                                                                                          ORGANISM
                                                                                                                                                         REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                              ACCESSION
                                                            VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
```

atch 84.8%; Score 831.6; DB 9; Length 1201; cal Similarity 95.0%; Pred. No. 4.6e-212;	Matches 911; Conservative 11; Mismatches 26; Indels 11; Gaps Oy 22 ATGGCACAGGTTCTCAGAGGCACTGTGACTGACTTGCCTGGATTTGATGAGGGGGTGAT	DD 208 AIGGCARAGGCTATGGAAAGGCTATGGGAAGGCATGGGCACAGATGAGGAAGGCATGTGACT 141 Qy 82 GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGAGA	142 CIGTIGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG 2	QY 202 TTGGCAGGGATCTTCTGGATGACCTGAAATCAGAAACTTGAAAAATTA 261 Db 388 TTTGGCAGGGATCTTCTGGATGACCTGAAATCAGAACTAGGAAAATTTGAAAAATTA 447	OY 262 ATTGTGGCTCTGATGAAACCCTCTCGGCTTFATGATGCTTATGAACTGAAACATGCCTTG 321	OY 322 AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAAATTATTGCTTCAAGGACACCTGAA 381	382 GAACTGACAGCATCAAACAAGTTTATGAACAAGAATATGGCTCAAGCCTGGAAGATGAC	Db 628 GTGGTGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC 687 Qy 502 AGAGACCTGATGCTGGAATTGATGAGGTCCAAGTTGAACAAGATGCTCAGGCTTTATT 561 Db 688 AGAGACCTGATGCTGGAATTGATGAAGTTCAAGTTGAAGATGCTCAGGCTTTATT 747	Qy 562 CAGGCIGGAGAACTTAAATGGGGGACACATGAAGAAAGTTTATCACCATCTTTGGAACA 621 	Oy 622 CGAAGTGTGTCTCATTTGAGAAAGTGTTTGACAAGTACATGACTATATCAGGATTTCAA 681	OY 682 ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT 741	Oy 742 GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG 801	Oy 902 GGAGCTGGGACAGATGATACCTCATCAGAGTCATGGTTTCCAGGAGTGAGATTGAT 861	OY 862 CTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTTTTCCATGATT 921	QY 922 AAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGCTGCTCTCCGGAGAAGATGA 980	RESULT 13 AL517516 AL517516 1201 bp mRNA linear EST 12-MAY-2003
442 GTGGTGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAAC 501	CTAAC	CAGGCTGGGGAACTTAAATGGGGGACAGATGAAGAAAGTTTATCACCATCTTTC	622 CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA 681 	682 ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT7741 	742 GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG 801 	802 GGAGCTGGGACAGATGATGATACCCTCATGAGAGTCATGGTTTCCAGGAGTGAGATT 858 	RESULT 12 AL547761 LOCUS AL547761 DEFINITION AL547761 Homo saplens PLACENTA COT 25-NORMALIZED Homo saplens CDNA clone CSODI0177J11 5-PRIME, mRNA sequence.		Eukaryota; Metazoa; Cnordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. AUTHORS Li W. B., Gruber,C., Jessee,J. and Polayes,D. TTTLE Full-length chwa libraries and normalization		DEP 191 91006 EVEX cedex - France Email: segref@genoscope.cns.fr, Web : www.genoscope.cns.fr Library was constructed by Life Technologies, a division of francitrogen whis sequence helpone to construct the sequence of the perfect of the sequence of the se		reng Liang F http://fulll Faraday Aven Loc	Outce 1.1201 /organism="Homo sapiens" /mol_type="mRNA" /db_xref="taxon:9606"	/clone="CSDLUINTAIL" /tlssue_type="PLACENTA COT 25-NORMALIZED" /clone_llb="Homo sapiens PLACENTA COT 25-NORMALIZED" /forte="lst strand CDNA was primed with a NOTL-ollyqo(dT) primer Five orine and enriched double-strand chwa was	digested with Not I and cloned into the Not I and Ecom V sites of the pCMVSPORT 6 vector. Library was normalized." COUNT 311 a 252 c 305 g 306 t 27 others

683

501

743 621 803 681 863 741 923 800 983 860

561

Fri

```
AL541412 Homo sapiens PLACENTA Homo sapiens cDNA clone CSODE006XJ10 AL54H121 Homo sapiens PLACENTA Homo sapiens cDNA clone CSODE006XJ10 AL54H112.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 1201)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Fill-length CDNA libraries and normalization Unpublished
On Feb 15, 2001 this sequence version replaced gi:12872460.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Contact: Genoscope Genoscope Genoscope Control British British
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                http://www.genoscope.cns.fr/
cgi.bin/cluster.cg/7seq-CSODEO06DE050Pl&cluster-2353.r. Contact
Feng Liang Email : filangelifetech.com URL :
http://fulllength.livitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID : CSODE006DE050Pl.
                                                                                                                                                                                                                                                             GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTA-TTATGCTATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              861 TCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTCTTTATTCCATGAT
      GTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTGTTCTCCTTCAGGCTAAC
                                        AGAGACCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            921 TAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTCTGC 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="CSODE006yJ10"
/tissue_type="PLACENTA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AL541412.2 GI:30545565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          864
                                                                                                                                   502
      442
                                                                   624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 14
AL541412
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                g
                                                                                                                                οy
                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ογ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo saplens"
/mol_type="mRNA"
/do_xref="tsoon:9606"
/do.xref="tsoon:9606"
/clone="CSODA003YF05"
/clone="type="NEUROBLASTOMA"
/clone="type="NEUROBLASTOMA"
/clone="type="NEUROBLASTOMA"
/clone="type="NEUROBLASTOMA"
/clone="type="NEUROBLASTOMA"
/clone="type="type="type"" NEUROBLASTOMA"
/clone="type="type="type" neurope saplens neurope saple
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGTTGACATCCCGAAGTAATGCTCAGCGCCAGGAAATCTCTGCAGCTTTTAAGACTCTG 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CSODA003CC03QPl&cluster=2353.r. Contact :
cgi-bin/cluster.cgi?seq=CSODA003CC03QPl&cluster=2353.r. Contact :
fergi_Lang Email : fliangelifetech.com URL :
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID : CSODA003CC03QPl.
Location/Qualifiers
                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 1201)

Li, W.B., Gruber, C., Jessee, J. and Polayes, D.

Full-length cDNA libraries and normalization

Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Email: seqreféqenoscope.cns.fr, Web : www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
more information about this cluster, see
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22 ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGGGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                      2001 this sequence version replaced gi:12781009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atch
84.5%; Score 828.6; DB 9; Length 1201;
cal Similarity 93.5%; Pred. No. 3e-211;
880; Conservative 14; Mismatches 40; Indels 7;
CS0DA003YF05 5-PRIME, mRNA sequence.
                                                         AL517516.2 GI:30534896
                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                         On Feb 13, 2001 thi
Contact: Genoscope
                                                                                                                                                                 sapiens
                                 AL517516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . 317
                                                                                                                                                           Нопо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Loca
Matches
                          ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
```

```
Similarity
                                                                                                                                                                                                                                                                                                                                                                                 282
                                                                                                                                                                                                                                                                                                                                                                                                                        840;
 919
                 1092
                                                                                                                                                                                                                                                                                                                                                                                                                                         22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       416
                                                                                                                                                                                                                                                                                                                                                                                                          Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        262
                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
Matches 84
                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                 BASE COUNT
ORIGIN
                                                                DEFINITION
                                                                                                                                      REFERENCE
AUTHORS
TITLE
JOURNAL
                                         RESULT 15
AL583578
                                                                                                               ORGANISM
                                                                                ACCESSION
                                                                                        VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                            FEATURES
                g
  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                          ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
/clone_lib="Homo sapiens PLACENTA"

/clone_lib="Homo sapiens PLACENTA"

/note="Vector: pCMVSPORT_6" ist strand cDNA was primed

with a NotI-oilgo(dT) primer. Five prime end enriched,

double-strand cDNA was digested with Not I and cloned into

the Not I and EcoRV sites of the pCMVSPORT 6 vector.

Library was not normalized." 38 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       255
                                                                                                                                                      315
                                                                                                                                                                                    375
                                                                                                                                                                                                                                                  495
                                                                                                                                                                                                                                                                                  555
                                                                                                                                                                                                                                                                                                                  615
                                                                                                                                                                                                                                                                                                                                                  675
                                                                                                                                      141
                                                                                                                                                                     201
                                                                                                                                                                                                    261
                                                                                                                                                                                                                   435
                                                                                                                                                                                                                                   321
                                                                                                                                                                                                                                                                   381
                                                                                                                                                                                                                                                                                                  441
                                                                                                                                                                                                                                                                                                                                  501
                                                                                                                                                                                                                                                                                                                                                                 561
                                                                                                                                                                                                                                                                                                                                                                                 735
                                                                                                                                                                                                                                                                                                                                                                                                621
                                                                                                                                                                                                                                                                                                                                                                                                                795
                                                                                                                                                                                                                                                                                                                                                                                                                                 680
                                                                                                                                                                                                                                                                                                                                                                                                                                                 855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               918
                                                                                                        81
                                                                                                                                                                   916 TIGIGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGA
                                                                                                       ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                     GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAAGCATCCTGACT
                                                                                                                                             GCAGAAACTCTTCGGAAGGCTATGAAAGCCTTGGGCACAGATGAGGAGAGCATCTGACT
                                                                                                                                                                                                   ATTGTGGCTCTGATGAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                  AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                                                                                                                                                                                                                                  GAACTGAGAGCCATCAAACAAGTTTATGAAGAAGAATATGGCTCAAGCCTGGAAGATGAC
                                                                                                                                                                                                                                                                                                                                  GTGGTGGGGGACACTTCAGGGTACTACCAGGGGATGTTGGTGGTTCTCCTTCAGGCTAAC
                                                                                                                                                                                                                                                                                                                                         TTGTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGACCCTCTATTATGCTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTCATGG-TTTCCAGGAGTGAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGGAGCTGGGACAGATGATCATACCCTCATCAGAGTYATGGTTTTCYAGGAGTGAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATCTGTTTAACATCAGGAAGGAGTTTAGGAAGAATTTTGCCACCTCTTTATTCCATG
                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7;
                                                                        Length 1201;
                                                                                        Indels
                                                                                         50
                                                                      Score 822; DB 9;
Pred. No. 1.8e-209;
                                                                    6
                                                                                        18; Mismatches
                                                                       tch 83.8%; al Similarity 94.3%; 886; Conservative 1
                                                315
                                                                                                                                                                                                                   376
                                                                                                                                                                                                                                                                                                                                                919
                                                                                                                                                                                                                                                                                                                                                                              949
                                                                                                                                                                                                                                                                                                                                                                                                                736
                                                                                                      22
                                                                                                                                     83
                                                                                                                                                    256
                                                                                                                                                                    142
                                                                                                                                                                                   316
                                                                                                                                                                                                   202
                                                                                                                                                                                                                                   262
                                                                                                                                                                                                                                                  436
                                                                                                                                                                                                                                                                 322
                                                                                                                                                                                                                                                                                  496
                                                                                                                                                                                                                                                                                                  382
                                                                                                                                                                                                                                                                                                                556
                                                                                                                                                                                                                                                                                                                                 442
                                                                                                                                                                                                                                                                                                                                                                                                295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                856
                                                                                                                                                                                                                                                                                                                                                                502
                                                                                                                                                                                                                                                                                                                                                                                                                                               964
                                                                                                                                                                                                                                                                                                                                                                                                                                622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               800
                                                                         Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                681
                                                                                Local
                                               BASE COUNT
ORIGIN
                                                                                        Matches
                                                                         Query
                                                                                                                     g
                                                                                                                                                                                                                8
                                                                                                                                                                                                                                             g
                                                                                                        ò
                                                                                                                                     ð
                                                                                                                                                   윱
                                                                                                                                                                    ò
                                                                                                                                                                                  a
                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              윰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
```

```
Contact: Genoscope - Centre National de Sequencage
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Bmall: seqrefégenoscope.ons.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 2353.r For
more information about this cluster, see
http://www.genoscope.cns.fr/
cgl-bin/cluster.cgl?seq-CSODE004CB110P1cluster=2353.r. Contact :
Feng Liang Email : filang@lifetech.com URL :
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID : CSODE004CB110P1.
TCG
1..1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    into
                                                                                                                                                                                                                                                         RNA linear EST 13-MAY-2003 sapiens CDNA clone CS0DE004YD21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="mRNA"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="taxon:9606"
/clone="taxon:9606"
/clone="taxon:pcNVSPORT."
/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Euteleostomi; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGGCACAGGTTCTCAGAGGCACTGTGACTTCCCTGGATTTGATGAGCGGGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCAGAAACTCTTCGGAAGGCTATGAAAGGCTTGGGCACAGATGAGGAGGAGCATCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTGTGGCTCTGATGAAACCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g1:12952676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1022;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Craniata; Vertebrata; E
Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                 1131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Li, W.B., Gruber, C., Jessee, J. and Polayas, D. Full-length cDNA libraries and normalization Unpublished This sequence version replaced Contact: Genoscope
ATTAAGGGAGATACATCTGGGGACTATAAGAAAGCTCTTC
                                          Score 820.4; DB 9;
Pred. No. 4.3e-209;
5; Mismatches 1;
                                                                                                                                                                                                                                                             mRNA
                                                                                                                                                                                                                                                                                                    HOMO
                                                                                                                                                                                                                                                             ďq
                                                                                                                                                                                                                                                         AL583578
AL583578 Homo saplens PLACENTA
5-PRIME, MRNA sequence.
AL583578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chordata; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                            AL583578.2 GI:30606551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (bases 1 to 1022)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            83.6%;
99.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                          EST.
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
Eukaryota; Metazoa;
Mammalla; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
```

```
535
                                      501
                                                         561
                                                                 715
                                                                                              681
                   441
                            595
                                               655
                                                                                                                      742 GTGAAATCTATTCGAAGTATACCTGCCTACCTTGCAGAGACCCTCTATTATGCTATGAAG 801
                                                                                                                                         381
                                                                                                   682 ATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTACTCCTTGCTGTT 741
                                                        AAGGGAGCTGGAACAAATGAAAAAGTACTGACAGAAATTATTGCTTCAAGGACACCTGAA
                                                                                              CGAAGTGTGTCTCATTTGAGAAAGGTGTTTGACAAGTACATGACTATATCAGGATTTCAA
                                                                                                                                                                              1014 CTGTTTAA 1021
                                                                                                                                                                          CTGTTTAM 869
                  382
                           536
                                      442
                                               969
                                                         502
                                                                 959
                                                                           295
                                                                                     116
                                                                                              622
322
                  ò
                         셤
                                    ò
                                              g
                                                       ò
                                                              q
                                                                         8 6
                                                                                          ò
                                                                                                     g
                                                                                                                ò
                                                                                                                        g
                                                                                                                                 ò
                                                                                                                                            셤
                                                                                                                                                       ò
                                                                                                                                                              g
                                                                                                                                                                         ŝ
ŝ
        셤
```

Search completed: August 28, 2003, 19:38:16 Job time : 1678.67 secs THIS PAGE BLANK (USPTO)